

ICSO 2016

International Conference on Space Optics

Biarritz, France

18–21 October 2016

Edited by Bruno Cugny, Nikos Karafolas and Zoran Sodnik



Table of Contents and Authors



Contents

COMPONENTS FOR SPECTROMETERS 1

- 1056 01 **Design and tests of the sun baffle for the Sentinel-4 UVN embedded calibration assembly** [10562-127]
- 1056 02 **Development of the flight models for the Sentinel-4/UVN NIR-grating unit** [10562-44]
- 1056 03 **EUCLID/NISP GRISM qualification model AIT/AIV campaign: optical, mechanical, thermal and vibration tests** [10562-61]
- 1056 04 **Grism manufacturing by low temperature mineral bonding** [10562-10]

COMPONENTS FOR SPECTROMETERS 2

- 1056 05 **Characterization of diffraction gratings scattering in uv and ir for space applications** [10562-72]
- 1056 06 **Development of INP immersion grating for the near- to mid-infrared wavelength** [10562-54]
- 1056 07 **Low aberration monolithic diffraction gratings for high performance optical spectrometers** [10562-101]
- 1056 08 **Sodern recent development in the design and verification of passive polarization scramblers for space applications** [10562-105]

IMAGERS: MISSIONS IN DEVELOPMENT 1

- 1056 09 **Correlation of Ingenio/Seosat radiometric model with the results of the radiometric campaigns** [10562-207]
- 1056 0A **First light of Cassis: the stereo surface imaging system onboard the exomars TGO** [10562-77]
- 1056 0B **Sentinel-2a: multi-spectral instrument first in-orbit performance** [10562-35]
- 1056 0C **Sentinel-3a: commissioning phase results of its optical payload** [10562-187]

IMAGERS: MISSIONS IN DEVELOPMENT 2

- 1056 0D **Development of the new generation of geostationary ocean color imager** [10562-80]
- 1056 0E **METIMAGE: a spectro-radiometer for the VII mission onboard METOP-SG** [10562-84]

- 1056 OF **Remote sensing optical instrumentation for enhanced space weather monitoring from the L1 and L5 Lagrange points** [10562-81]
- 1056 OG **Report for mission selection of hyper resolution camera for Chinese Mars mission** [10562-96]

FREQUENCY STABILIZED LASERS

- 1056 OH **Developments of highly frequency and intensity stabilized lasers for space gravitational wave detector decigo/pre-decigo** [10562-29]
- 1056 OI **First investigation of an all-fiber versatile laser frequency reference at 2 μm for CO₂ lidar applications** [10562-228]
- 1056 OJ **High stability laser for interferometric earth gravity measurements** [10562-76]
- 1056 OK **The absolute frequency reference unit for the methane-sensing lidar mission Merlin** [10562-66]

LASER TECHNOLOGY FOR SPACE APPLICATIONS 1

- 1056 OL **An efficient 2 μm optical parametric amplifier based on large-aperture periodically poled RB:KTP** [10562-60]
- 1056 OM **Design optimization of fiber amplifiers exposed to high gamma-radiation doses** [10562-108]
- 1056 ON **Radiation tests on semiconductor optical sources for space applications** [10562-106]

LASER TECHNOLOGY FOR SPACE APPLICATIONS 2

- 1056 OO **Conduction cooled compact laser for the supercam Libsraman instrument** [10562-5]
- 1056 OP **FULAS: high energy laser source for future lidar applications** [10562-23]
- 1056 OQ **Low-stress soldering technique used to assemble an optical system for aerospace missions** [10562-50]

SCIENTIFIC INSTRUMENTATION 2

- 1056 OU **Application of biomimetics principles in space optics** [10562-67]
- 1056 OV **Mounting, metrology and verification of Euclid near infrared spectro-photometer optical assembly NI-OA** [10562-119]
- 1056 OW **Atise: a miniature Fourier-transform spectro-imaging concept for surveying auroras and airglow monitoring from a 6/12u cubesat** [10562-243]
- 1056 OX **Batman and Robin: next generation spectro-imagers for space observation** [10562-256]

FIBER SENSORS

- 1056 0Y **Design challenges of a tunable laser interrogator for geo-stationary communication satellites** [10562-153]
- 1056 0Z **High temperature optical fiber sensor for atmospheric reentry** [10562-200]
- 1056 10 **Integrated photonics for fiber optic based temperature sensing** [10562-280]
- 1056 11 **Photonically wired spacecraft panels: an economic analysis and demonstrator for telecommunication satellites** [10562-215]

STRAYLIGHT AND MATERIALS

- 1056 12 **Innovative CNT-based composite coatings for the stray light reduction** [10562-156]
- 1056 13 **Light scattering characterization of optical components for space applications** [10562-98]
- 1056 14 **The ESA radglass activity: a radiation study of non rad-hard glasses** [10562-62]
- 1056 15 **Vane-free design for star trackers and telescopes** [10562-275]

IMAGERS: ON GROUND CALIBRATION

- 1056 16 **Calibration OGSE for a multichannel radiometer for Mars atmosphere studies** [10562-137]
- 1056 17 **Metimage: calibration and performance verification** [10562-206]
- 1056 18 **The CHEOPS (characterising exoplanet satellite) mission: telescope optical design, development status and main technical and programmatic challenges** [10562-245]

PHOTONIC DEVICES

- 1056 19 **Comparison of gamma radiation effect on erbium doped fiber amplifiers** [10562-202]
- 1056 1A **Electro-optic modulators for space using gallium arsenide** [10562-185]
- 1056 1B **Mid-power pm booster and optical fiber pre-amplifier for 1.55 um satellite laser communications** [10562-122]
- 1056 1C **Radiation hardening commercial off-the-shelf erbium doped fibers by optimal photo-annealing source** [10562-33]

COATINGS 1

- 1056 1D **A new ECSS standard for environmental durability testing of optical coatings for space application** [10562-26]

1056 1E **Iridium coatings for space based x-ray optics** [10562-177]

COATINGS 2

1056 1F **Mechanical stress in dielectric mirrors: towards a fine control of the flatness** [10562-71]

1056 1G **New approaches for the design and the fabrication of pixelated filters** [10562-125]

1056 1H **Phase distortion and thickness variation in the design of optical coatings** [10562-264]

1056 1I **Pixelated coatings and advanced IR coatings** [10562-265]

SPECTROMETERS: ATMOSPHERIC

1056 1J **Knowing what we breathe: Sentinel 4: a geostationary imaging UVN spectrometer for air quality monitoring** [10562-87]

1056 1K **New generation polar-orbiting meteorological satellite of China and its greenhouse gases monitoring payload** [10562-53]

1056 1L **Sentinel-5: a novel measurement approach to quantify diffuser induced spectral features** [10562-57]

SPECTROMETERS: ATMOSPHERIC / CONCEPTS & TECHNOLOGIES

1056 1M **AOTF spectrometers in space missions and their imaging capabilities** [10562-283]

1056 1N **First aircraft test results of a compact, low cost hyperspectral imager for earth observation from space** [10562-41]

1056 1O **Spex the Dutch roadmap towards aerosol measurement from space** [10562-263]

1056 1P **The microcarb instrument** [10562-258]

EARTH OBSERVATION LIDAR SYSTEMS

1056 1Q **Atlid, ESA atmospheric lidar: manufacture and test results of instrument units** [10562-130]

1056 1R **Column carbon dioxide and water vapor measurements by an airborne triple-pulse integrated path differential absorption lidar: novel lidar technologies and techniques with path to space** [10562-248]

1056 1S **Merlin: an integrated path differential absorption (IPDA) lidar for global methane remote sensing** [10562-100]

LIDAR TECHNOLOGIES

- 1056 1U **Caveats and pitfalls of high energy UV laser operation on ground** [10562-236]
1056 1V **Co2 remote detection using a 2-µm dial instrument** [10562-149]
1056 1W **On the benefit of airborne demonstrators for space borne lidar missions** [10562-220]

PHOTONIC MICROWAVE PAYLOADS

- 1056 1X **Coherent photonic beamformer for a Ka-band phased array antenna receiver implemented in silicon photonic integrated circuit** [10562-121]
1056 1Y **Flexible photonic payload for broadband telecom satellites: from concepts to system demonstrators** [10562-162]
1056 1Z **Ka-to-l-band frequency down-conversion using a micro-photonic III-V-on-silicon mode-locked laser and Mach-Zehnder modulator** [10562-164]
1056 20 **Tunable and reconfigurable photonic Rf filtering for flexible payloads** [10562-259]

PHOTONIC MICROWAVE AND DIGITAL PAYLOADS

- 1056 21 **Optical beamforming based on microwave photonic signal processing** [10562-75]
1056 22 **Photonic transceivers for spacecraftdatalinks up to 5 Gbps** [10562-229]

TELESCOPE AIT

- 1056 23 **Fine guidance sensor/near-infrared imager and slitless spectrograph on James Webb Space Telescope: pupil alignment methodology and metrology** [10562-14]
1056 24 **High precision assembling process and optomechanical characterization of the optical subassemblies for the ENMAP hyper spectral imager instrument** [10562-219]
1056 25 **James Webb Space telescope optical simulation testbed: experimental results with linear control alignment** [10562-86]
1056 26 **Optical integration process for the earth-observing satellite mission ENMAP** [10562-58]

OPTICAL DESIGN

- 1056 27 **Design and end-to-end modelling of a deployable telescope** [10562-179]
1056 28 **Freeform mirror based optical systems for nano-satellites** [10562-204]

- 1056 29 **Low-order aberration coefficients applied to design of telescopes with freeform surfaces** [10562-173]
- 1056 2A **Optical design of Arago's spectropolarimeter** [10562-244]
- 1056 2B **Towards a standardized method to assess straylight in earth observing optical instruments** [10562-178]

SPECTROMETERS: CONCEPTS & TECHNOLOGIES

- 1056 2C **Carbonsat instrument pre- developments: towards monitoring carbon dioxide and methane concentrations from space** [10562-222]
- 1056 2D **Nano-VIPA: a miniaturized high-resolution echelle spectrometer, for the monitoring of young stars from a 6u cubesat** [10562-239]
- 1056 2E **Pre-development of the CCD detector of the Flex mission** [10562-176]
- 1056 2F **Radiation induced charge transfer inefficiencies in the Sentinel 4 instrument: modeling, performance, and correction** [10562-138]

SPECTROMETERS: SURFACE

- 1056 2G **Full field x-ray fluorescence imaging using micro pore optics for planetary surface exploration** [10562-180]
- 1056 2H **Instrument pre-development for flex mission** [10562-278]
- 1056 2I **The hyperspectral instrument onboard ENMAP: overview and current status** [10562-191]
- 1056 2J **The supercam infrared instrument on the NASA Mars2020 mission: optical design and performance** [10562-246]
- 1056 2K **The supercam instrument on the NASA Mars 2020 mission: optical design and performance** [10562-266]

CMOS SENSORS

- 1056 2L **Backside illuminated CMOS-TDI line scanner for space applications** [10562-140]
- 1056 2M **CMOS detectors: lessons learned during the STC stereo channel preflight calibration** [10562-148]
- 1056 2N **CMOS sensors for atmospheric imaging** [10562-15]
- 1056 2O **EUROCMOSHF: demonstration of a fully European supply chain for space image sensors** [10562-141]

1056 2P **High speed TDI embedded CCD in CMOS sensor** [10562-152]

STUDIES FOR FSO LINKS

- 1056 2Q **Application of spinal code for performance improvement in free-space optical communications** [10562-188]
- 1056 2R **Hybrid ARQ communications for severely degraded Hermite-Gaussian FSO link** [10562-281]
- 1056 2S **Outlook on EDRS-C** [10562-169]

IN-ORBIT FLIGHT DEMONSTRATIONS & FUTURE MISSIONS

- 1056 2T **The asteroid impact mission: testing laser communication in deep-space** [10562-20]
- 1056 2U **OPTEL- μ LEO to ground laser communications terminal: flight design and status of the EQM development project** [10562-52]
- 1056 2V **The ESA's optical ground station for the EDRS-A LCT in-orbit test campaign: upgrades and test results** [10562-79]
- 1056 2W **Design of the optical communication system for the asteroid impact mission** [10562-242]
- 1056 2X **Development of a breadboard model of space laser communication terminal for optical feeder links from Geo** [10562-257]

ACTIVE OPTICS 1

- 1056 2Y **Active optics for next generation space telescopes** [10562-6]
- 1056 2Z **Comparison of wavefront control algorithms and first results on the high-contrast imager for complex aperture telescopes (hicat) testbed** [10562-158]
- 1056 30 **Electromagnetic deformable mirror for space applications** [10562-170]
- 1056 31 **Monomorph deformable mirrors: from ground-based facilities to space telescopes** [10562-291]

ACTIVE OPTICS 2

- 1056 32 **Active support with set-and-forget characteristics for reflective optics** [10562-212]
- 1056 33 **Design study for an active metal mirror: sub-system of a correction chain for large UVOIR space telescopes** [10562-213]
- 1056 34 **Toward large diffraction limited space telescopes with the Latt lightweight active primary** [10562-251]

1056 35 **Hypatia: a 4m active space telescope concept and capabilities** [10562-271]

SPECTROMETERS: CONCEPTS & TECHNOLOGIES / ON-GROUND CHARACTERIZATION

1056 36 **V-UV spectrographic imager (FUV) for Icon mission: from optical design to vacuum calibration** [10562-18]

1056 37 **Design of an imaging spectrometer for earth observation using freeform mirrors** [10562-161]

SPECTROMETERS: ON-GROUND CHARACTERIZATION

1056 38 **Ground test equipment description for NISP instrument validation on ground** [10562-39]

1056 39 **On-ground characterization approach of the Sentinel-5 instrument** [10562-42]

1056 3A **Introduction to the novel verification concept of the instrument performances for the Meteosat third generation infrared sounder instrument (mtg-irs)** [10562-78]

1056 3B **Results of the Tropomi calibration campaign** [10562-103]

DETECTORS AND ELECTRONICS

1056 3C **The design and development of low- and high-voltage asics for space-borne CCD cameras** [10562-63]

1056 3D **Intrapixel measurement techniques on large focal plane arrays for astronomical applications: a comparative study** [10562-112]

1056 3E **CMOS microcamera for space applications (3DCM681)** [10562-247]

1056 3F **HgCdTe APDS for time resolved space applications** [10562-279]

ATTITUDE CONTROL

1056 3G **How low can you go: sunsensors for extreme sensing applications** [10562-1]

1056 3H **The CHEOPS calibration bench** [10562-12]

1056 3I **A compact optical 5 degrees of freedom attitude sensor for space applications** [10562-223]

OPTICAL GROUND STATION TECHNOLOGIES

1056 3J **Adaptive optics testbed for pre- and post-compensation of earth-to-geo optical communication: downlink results** [10562-190]

1056 3K **The TESAT transportable adaptive optical ground station and the operational experiences** [10562-217]

1056 3L **Use of adaptive optics in ground stations for high data rate satellite-to-ground links** [10562-224]

QUANTUM TECHNOLOGIES

1056 3M **Toward optimum efficiency in a quantum receiver for coded ppm** [10562-11]

1056 3N **Benefits of time-frequency coding for quantum key distribution** [10562-193]

1056 3O **Quantum measurements of signals from the Alphasat TDP1 laser communication terminal** [10562-199]

MIRRORS

1056 3P **High performance equipped mirrors for MTG FCI-TA and IRS-FTO** [10562-46]

1056 3Q **The SiC primary mirror of the EUCLID telescope** [10562-48]

1056 3R **Talc a far-infrared 20m space telescope and the ELICSIR consortium to reach TRL 3** [10562-233]

1056 3S **Advanced space optics development in freeform optics design, ceramic polishing, rapid and extreme freeform polishing** [10562-241]

GRAVITATIONAL WAVE DETECTION

1056 3T **Space gravitational wave detector DECIGO/pre-DECIGO** [10562-21]

1056 3U **High resolution atom interferometry with optical resonators** [10562-252]

ALIGNMENT

1056 3V **Laser ranging interferometer on Grace follow-on** [10562-171]

1056 3W **Mechanisation of precision placement and catalysis bonding of optical components** [10562-56]

1056 3X **Sensitivity analysis of phase diversity technique for high resolution earth observing telescopes** [10562-22]

IR SENSORS

- 1056 3Y **Radiometric characterization of type-II InAs/GaSb superlattice (t2sl) midwave infrared photodetectors and focal plane arrays** [10562-24]
- 1056 3Z **Overview of space activity at Sofradir and new trends for future detector for science applications** [10562-64]
- 1056 40 **HgCdTe detectors for space and science imaging in France: general issues and latest achievements** [10562-232]
- 1056 41 **Below rule'07 low dark current I WIR and VLWIR MCT 2D focal plane detector arrays from Aim** [10562-268]
- 1056 42 **CNES infrared detector development for space missions: status and roadmap** [10562-272]

ON-BOARD SENSORS

- 1056 43 **A compact coherent population trapping clock with a short-term fractional frequency stability of $4.2 \times 10^{-13} \tau^{-1/2}$** [10562-27]
- 1056 44 **An on-board calibration assembly (OBCA) on the ENMAP satellite** [10562-109]
- 1056 45 **Experimental demonstration of reduced tilt-to-length coupling by using imaging systems in precision interferometers** [10562-132]
- 1056 46 **Fiber based optical frequency comb: technical challenge for space applications** [10562-226]

IN-ORBIT DEMONSTRATIONS WITH SMALL OPTICAL TRANSPONDER (SOTA)

- 1056 47 **Sota optical downlinks to DLR's optical ground stations** [10562-90]
- 1056 48 **Evaluation of communication performance for adaptive optics corrected geo-to-ground laser links** [10562-99]
- 1056 49 **On-orbit evaluation of satellite-ground laser communication experiment using small optical transponder (SOTA) equipment -Optical Antenna** [10562-189]
- 1056 4A **Experimental results of satellite-to-ground laser communications link through atmospheric turbulence using SOTA** [10562-192]
- 1056 4B **Laser communication experiments between Sota and Meo optical ground station** [10562-273]

POSTER SESSION 1

- 1056 4C **Pilot optical alignment** [10562-3]

- 1056 4D **Alternative optics for space x-ray telescopes: from large to small** [10562-2]
- 1056 4E **The testing and characterization of the CHEOPS CCDs** [10562-13]
- 1056 4F **Optical telescope refocussing mechanism concept design on remote sensing satellite** [10562-16]
- 1056 4G **Sentinel-5: monitoring and correction of charge transfer inefficiency using the instrument spectral response function of the spectrometer** [10562-17]
- 1056 4H **Description and performance of the OGSE for VNIR absolute spectroradiometric calibration of MTG-I satellites** [10562-30]
- 1056 4I **Beam steering mechanism for earthcare atmospheric lidar instrument ATLID: an ultra-stable piezoelectric tip tilt mechanism** [10562-31]
- 1056 4J **The SiC structure of the EUCLID NISP instrument** [10562-32]
- 1056 4K **Early study on the application of Nexcera ultra low thermal expansion ceramic to space telescopes** [10562-34]
- 1056 4L **Focal plane for the next generation of earth observation instruments** [10562-36]
- 1056 4M **Slit manufacturing and integration for the Sentinel-4 NIR and UV-VIS spectrometers** [10562-37]
- 1056 4N **Measurements by ESPI of surface deformations of a heated mirror and comparison with multiphysics simulations** [10562-38]
- 1056 4O **Tackling sun intrusion: a challenge of close collaboration of thermal, mechanical, structural and optical engineers** [10562-45]
- 1056 4P **A fiber-coupled gas cell for space application** [10562-59]
- 1056 4Q **Twenty months development for the Cassis telescope: re-use building blocks and concurrent engineering** [10562-70]
- 1056 4R **Alignment concept for the three mirror anastigmat telescope assembly of the Meteosat third generation flexible combined imager** [10562-73]
- 1056 4S **Fine alignment of aerospace telescopes for the earth observation satellite mission ENMAP** [10562-74]
- 1056 4T **Development of a calibration equipment for spectrometer qualification** [10562-82]
- 1056 4U **NANOCARB-21: a miniature Fourier-transform spectro-imaging concept for a daily monitoring of greenhouse gas concentration on the Earth surface** [10562-83]
- 1056 4V **Stray light testing of WISPR baffle development model** [10562-85]
- 1056 4W **An afocal telescope configuration for the ESA Ariel mission** [10562-91]

- 1056 4X **The design and assembly of aluminum mirrors of a three-mirror-anastigmat telescope** [10562-93]
- 1056 4Y **Innovative focal plane design for large space telescopes** [10562-276]
- 1056 4Z **Flexible focal plane arrays for UVOIR wide field instrumentation** [10562-277]
- 1056 50 **Vertically aligned carbon nanotubes black coatings from roll-to-roll deposition process** [10562-282]

POSTER SESSION 2

- 1056 51 **Investigation of coherent receiver designs in high-speed optical inter-satellite links using digital signal processing** [10562-97]
- 1056 52 **Optoelectronic modules for space applications** [10562-102]
- 1056 53 **A compact frequency stabilized telecom laser diode for space applications** [10562-107]
- 1056 54 **Design and manufacturing of a compact two-mirror system for multispectral imaging applications** [10562-110]
- 1056 55 **Methods and setup for spectral characterization of laser diodes for atomic clocks** [10562-113]
- 1056 56 **MTG-SCA micro-vibration test bench development using linear interferometry** [10562-114]
- 1056 57 **Development and optical performance tests of the Si immersed grating demonstrator for E-ELT METIS** [10562-116]
- 1056 58 **Multi-core fiber amplifier arrays for intra-satellite links** [10562-118]
- 1056 59 **Opto-microwave Butler matrixes based front-end for a multi-beam large direct radiating array antenna** [10562-133]
- 1056 5A **FOV mask optimization for miniaturized radiometers** [10562-135]
- 1056 5B **Influence of the Exomars 2016 lander elements in the uncertainty of irradiance measurements for the dreams-SIS instrument.** [10562-136]
- 1056 5C **Development of digital correlated double sampling (DCDS) camera electronics for the space-based world space observatory ultra-violet spectrograph mission** [10562-142]
- 1056 5D **Random-modulation differential absorption lidar based on semiconductor lasers and single photon counting for atmospheric CO₂ sensing** [10562-155]
- 1056 5E **Demonstration of a high speed hybrid electrical and optical sensing system for next generation launcher applications** [10562-157]
- 1056 5F **Laser module based on monolithically integrated Mopas at 1.5 μm for space-borne lidar applications** [10562-159]

- 1056 5G **Dual, feed-forward + feed-back laser frequency control for efficient and convenient diode laser line narrowing** [10562-163]
- 1056 5H **Wave front sensing for next generation earth observation telescope** [10562-172]
- 1056 5I **Engineering model of the optical space CS clock** [10562-174]
- 1056 5J **Owls as platform technology in OPTOS satellite** [10562-175]
- 1056 5K **A low noise laser interferometry readout for challenging acceleration measurements in space** [10562-181]
- 1056 5L **Software defined coherent lidar (SD-Cl) architecture** [10562-184]
- 1056 5M **On-ground tests of the NISP infrared spectrometer instrument for Euclid** [10562-284]

POSTER SESSION 3

- 1056 5N **system aspects of optical LEO-to-ground links** [10562-25]
- 1056 5O **Inter-island demonstration of optical communication links in robotic operations** [10562-95]
- 1056 5P **An accelerated gamma irradiation test of low dose rate for a single mode fiber** [10562-194]
- 1056 5Q **Finite element model assisted shimming of Ingenio/Seosat primary mirrors** [10562-196]
- 1056 5R **Photopolymer materials for volume phase holographic optical elements** [10562-197]
- 1056 5S **Optical fiber sensors system on Proba-2 after 7 years** [10562-205]
- 1056 5T **Aspherical and freeform mirrors based on ultra-precise manufacturing for telescopes in the vis spectral range** [10562-211]
- 1056 5U **High speed, high frequency electro-photonic ADC for space enabled routers and flexible antennas** [10562-227]
- 1056 5V **Transportable system for in-field testing of adaptive optical pre-compensation for optical feeder links** [10562-231]
- 1056 5W **High reproducible CO₂ laser spliced fiber-collimator for a space borne laser system** [10562-240]
- 1056 5X **Multiple-beam output high-peak power Nd:YAG/Cr4+:YAG laser for laser ignition** [10562-254]
- 1056 5Y **Alignment and qualification of the Gaia telescope using a Shack-Hartmann sensor** [10562-267]
- 1056 5Z **Higgs-instrument: design and demonstration of a high performance gas concentration imager** [10562-290]

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

- Abich, K., 3V
Acef, O., 53
Achour, Sakina, 05
Adamiec, P., 0N, 5D
Ade, P., 4C
Adolph, P., 3L
Affolderbach, C., 55
Agócs, Tibor, 28, 57
Agullo, Jean-Marc, 1D
Ai, X., 5D
Aissa, B., 0Z
Aivar, J., 3P
Akioka, Maki, 2X, 47, 49, 4A
Aldridge, D., 23
Alecian, E., 2D
Almat, N., 55
Alpers, M., 1S
Altbauer, Annalena, 24
Álvarez, F. J., 16
Alvarez-Ríos, F. J., 5A, 5B
Álvaro, A., 5U
Amand, L., 3U
Amar, Christine, 1D
Amediek, Axel, 1W
Amiaux, J., 3R
Aminou, D. M. A., 4H
André, Y., 4C
Antonini, Tania, 31
Anzalchi, J., 21
Apéstigue, V., 16, 5B
Arcidiacono, C., 34
Arroyo, J. M., 5Q
Arruego, I., 16, 5B, 5J
Artaud, G., 48, 4B
Ataman, Caglar, 0X
Aubry, Marie, 31
Aumont, J., 4C
Austin, J., 3R
Aveline, M., 19, 1Y
Baatzsch, A., 0K, 3V
Bacher, M., 2U
Badoil, B., 4L
Baeten, M., 30
Bagnasco, G., 1J
Bahlawane, Naoufal, 12
Baier, N., 40
Baili, G., 5I
Baister, G., 2U
Balbi, M., 4S
Baldy, M., 5I
Barba, David, 0Z
Barbaste, R., 1Y
Barbero, Juan, 0N, 52, 58, 5D
Bardoux, A., 3E, 3F, 42
Barranco, G. F., 3V
Barth, A., 3J
Barthelemy, M., 0W
Barwood, G. P., 0J
Baselga Mateo, A., 1U
Basso, S., 54
Battistelli, E., 2H
Battles, D., 0K
Baustista, L., 4C
Bayraktar, Ö, 3O
Bazalgette Courrèges-Lacoste, G., 1J
Beaton, A., 23
Beaumont, F., 38
Beck, T., 18
Beckert, E., 0Q, 5W
Beeckman, G., 2O
Begou, Thomas, 1F, 1G
Beier, M., 37, 5T
Bell, S., 3C
Beller, N., 0J, 0K
Belmana, Salem, 4I, 4P
Beltrán, M., 20
Ben-Ari, N., 2L
Benazet, B., 1Y
Bender, R., 0V
Benkenstein, T., 02
Benson, O., 3N
Benz, W., 18
Bera, Olivier, 4P
Beraud, Pascal, 4P
Berkefeld, Thomas, 3K, 3L
Berlich, R., 3J, 5V
Bernard, J.-Ph., 4C
Bernard, Philippe, 1P
Bernardi, P., 2J, 2K
Berthon, J., 1G
Bertoldi, A., 3U
Bessler, Vivian, 5E
Betz, Matthias, 2I
Bézy, Jean-Loup, 08, 14, 2B, 2C, 2H
Bianco, A., 5R
Birmuske, R., 0K
Bittner, Hermann, 44
Blain, Pascal, 01, 36, 4T
Blake, D. F., 2G
Blanchet, G., 5H
Bode, A., 0V
Bode, M., 0P

- Bode, M., 1S
 Bogner, Stephanie, 24
 Bogoni, A., 5L
 Böhme, S., 5W
 Bolkhovitinov, A., 1U
 Bonfils, X., 2D
 Bonnefois, Aurélie, 25
 Borguet, B., 4T
 Boroson, D. M., 3M
 Borremans, J., 2P
 Boslooper, Erik, 39
 Boudjemaa, L., 0O
 Bouéé, A., 4T
 Bougoin, Michel, 3Q, 4J
 Bouillot, A., 2A
 Boulade, Olivier, 3D, 3Z, 40, 4C
 Boulenc, P., 2P
 Bourdarot, G., 0W, 2D
 Bourgain, F., 4I
 Bourne, D., 2S
 Bousquet, F., 4C
 Bousquet, P., 1S
 Boutillier, M., 3F
 Bouyer, P., 3U
 Bouzit, M., 4C
 Bozier, A., 38
 Brady, A., 32, 5V
 Brandl, Bernhard R., 57
 Bräuninger, Christoph, 44
 Braxmaier, C., 3V
 Bray, N., 4C
 Brechtelsbauer, Martin, 47, 5O
 Briguglio, R., 34
 Brinkers, S., 30
 Bristow, T., 2G
 Broeg, C., 18
 Brumer, M., 2L
 Buchheim, K., 2U
 Bueno, Jose Ignacio, 56
 Bulsa, G., 1J
 Buratti, E., 54
 Burkhardt, Matthias, 07
 Burkhardt, T., 0Q
 Burns, Tristan, 1L
 Burt, David, 2N
 Butenko, Y., 1U
 Buttice, V., 4C
 Cabeza, I., 09, 5Q
 Cadiou, Erwan, 1V
 Caes, M., 3Y
 Caillat, A., 4C
 Caillat, A., 03
 Caille, G., 59
 Cai's, Ph., 2J, 2K
 Calleri, Andrea, 4O
 Calosso, Claudio Enrico, 43
 Cameron, N., 1A
 Canuel, B., 3U
 Canuet, L., 48
 Carbó, F. L., 3A
 Carle, A., 38
 Carnelli, I., 2T, 2W
 Caron, J., 08, 2B, 2C, 2H
 Casciello, A., 4Q
 Castel, Didier, 4J
 Catrin, Rodolphe, 1D
 Celinkin, Mert, 0Z
 Cervera, C., 40
 Cessa, V., 18
 Chaigneau, M., 4C
 Chambion, Bertrand, 4Z
 Chan, Chia-Yen, 4X
 Chang, Shenq-Tsong, 4X
 Charra, M., 4C
 Chassat, F., 1Q
 Chastellain, F., 5I
 Chazelas, B., 3H, 4E
 Chesne, S., 3R
 Chicarella, Leonardo, 1D
 Chilian, C., 19
 Chiou, Chung-An, 5P
 Chlebek, Christian, 2I
 Choquet, Elodie, 25, 2Z
 Chorier, Philippe, 3Z
 Chou, Cathy, 36
 Christol, P., 3Y
 Chwalla, M., 45
 Ciapponi, A., 1U
 Civitani, M., 54
 Claeysen, F., 4I
 Clapp, M., 3C, 5C
 Claudi, R., 4W
 Clements, S., 1A
 Clermont, L., 01
 Coetzee, R. S., 0L
 Cohen, O., 2L
 Collette, C., 3R
 Compain, E., 4H
 Conan, J.-M., 48
 Conconi, P., 54
 Coppens, Tonny, 57
 Coppo, P. M., 2H
 Coppolose, W. W., 5I
 Cordero, E., 0N
 Costa, Ivo, 11
 Costard, E., 3Y
 Coste, Pierre, 0D
 Costes, V., 2Y
 Costille, A., 03, 13, 38
 Coudournac, C., 4C
 Coulon, J.-P., 5G
 Coulter, P., 23
 Cousty, Raphaël, 3I
 Crabb, Jonathan, 58
 Crane, B., 4C
 Cremonese, G., 0A, 2M, 4Q
 Croitoru, G., 5X
 Croizé, L., 4U
 Crussaire, J.-P., 4C
 Czichy, R., 3L

- Da Deppo, V., 0A, 2M, 4W
 Dahl, C., 3V
 Dahl, K., 0J, 0K
 Damm, C., 32, 37
 Danzmann, K., 45
 Dascalu, T., 5X
 de Bernardis, P., 4C
 de Clercq, Emeric, 43
 De Deckere, B., 1Z
 Deep, A., 4H, 4T
 de Goeij, B. T. G., 1N, 39
 Dehne, M., 3V, 5W
 de la Barrière, F., 3D
 Delacourt, B., 3F
 Delamer, S., 23
 Del Bello, U., 2H
 Deleuze, M., 2J
 Deline, A., 3H, 4E
 Delisle, C., 3D
 Delmas, M., 3Y
 de Longiviere, Xavier, 50
 Del Vecchio, C., 34
 Delvit, J.-M., 2Y, 3X, 5H
 Demiguel, Stéphane, 2O
 de Mingo, J. R., 5J
 De Moor, P., 2O, 2P
 De Munck, K., 2O
 DeRoux, N., 4Q
 Derycke, C., 0O
 Descarpentries, J., 50
 Descours, Francis, 4L
 De Sio, A., 2M
 Desselle, Richard, 36
 Devaney, Nicholas, 33, 35
 de Vries, J., 3B
 de Vries, O., 0M
 Dherbecourt, Jean-Baptiste, 1V
 Diehl, Torsten, 07
 Diekmann, C., 0K
 Di Marcantonio, Paolo, 0X
 Dingjan, J., 3B
 Dirks, B. P. F., 1N
 Doelman, N., 30
 Döhring, T., 1E
 Dolkens, Dennis, 27
 Douahi, A., 5I
 Douchin, F., 4C
 Doumayrou, E., 4C
 Dovillaire, G., 5Y
 Druart, G., 3D
 Drummond, M. V., 1X
 Duan, Pengfei, 1K
 Duarte, V. C., 1X
 Dubois, J. P., 4C
 Dubowy, M., 0V
 Dubreuil, D., 3D
 Dubroca, G., 08
 Dufreche, P., 5I
 Dumas, A., 3F
 Duncan, J., 2S
 Duparré, Angela, 13, 15
 Durand, Eric, 0O
 Durand, G., 3R
 Durand, Y., 4H
 Durin, Christian, 1D
 Ealet, Anne, 5M
 Eberhardt, R., 0M, 0Q, 33
 Eberle, Sebastian, 44
 Edmunds, James, 1B
 Egner, S., 3A
 Egron, Sylvain, 25, 2Z
 Ehrenreich, D., 18
 Ehret, Gerhard, 1S, 1W, 5D
 Eich, D., 41
 Elder, J., 52
 El-Maarry, M. R., 0A
 Elser, D., 3O
 Engel, C., 4C
 Enokida, Y., 0S
 Era, F. F., 1U
 Erdmann, Lars E., 07
 Erhard, Markus, 24, 2I, 44
 Escolle, Clément, 25
 Esposito, Marco, 1O
 Esquivias, I., 0N, 5D, 5F
 Etcheto, Pierre, 05, 4C
 Evenblij, R. S., 10
 Fabian, S., 5W
 Fabron, C., 38
 Fäcke, T., 5R
 Fan, Bin, 1K
 Fappani, Denis, 3P
 Farnan, Martin, 0Y, 5E
 Farzana, Jihan, 1B, 58
 Faugeron, M., 0N, 5F
 Faure, Benoit, 0O, 5G
 Favard, P., 5I
 Feriencik, Marco, 3L
 Feriencik, Mikael, 3K, 3L
 Fernán, A. A., 16
 Fernández Barránco, G., 45
 Fernández, J. M., 16
 Fernandez, Valerie, 0B
 Ferrari, Marc, 25, 4Y, 4Z
 Ferrec, Y., 4U
 Ferreira, Luis, 1L
 Fiault, G., 0Q
 Ficai Veltroni, I., 0A
 Fick, W., 41
 Fieque, Bruno, 3Z, 40, 42
 Figgemeier, H., 41
 Filipowicz, Marta, 58
 Fischer, Edgar, 3K, 3L
 Fischer, Sebastian, 24, 26, 2I, 44
 Fitzau, O., 0J
 Fitzsimons, Ewan D., 3W, 45
 Fix, Andreas, 1W, 5D
 Flügel-Paul, T., 02, 04
 Focardi, M., 4W
 Foenard, G., 4C

- Folco, Y., 5I
 Folsom, C. P., 2A
 Forget, M., 08
 Fortier, A., 18
 Fossati, E., 2H
 Fouchet, T., 2J
 Foulon, B., 03
 François, M., 4T
 Francou, L., 2U, 4Q
 Fray, S., 4R
 Freudling, M., 3A
 Freund, R., 3N
 Frey, Harald U., 36
 Fu, Ruimin, 0G
 Fuchs, Christian, 47, 5N, 5O
 Fusco, Thierry, 25, 2Z
 Fuse, T., 2X
 Gaeremynck, Yann, 4Z
 Gailhanou, M., 2G
 Gal, C., 0V, 2H
 Gambart, D., 3E
 Gambicorti, L., 0A, 18
 García, J., 20
 Garcia, J., 38
 Garcia, M., 5I
 Garcia-Sanchez, E., 3E
 Gaschet, Christophe, 4Z
 Gascon, Ferran, 0B
 Gatto, Alexandre, 07
 Gawlik, K., 0V
 Ge, X., 1N
 Gebhardt, A., 37
 Geiger, R., 3U
 Gélot, P., 4C
 Genestier, D., 08
 Geoffray, Hervé, 42
 Georges, Laurent, 1P
 Georges, M. P., 4N
 Gerber, M., 0A, 4Q
 Gerberding, O., 45
 Gerbert-Gaillard, Alexandre, 3Q
 Gershon, G., 2L
 Gétin, Stephane, 4Z
 Geyl, R., 3S
 Ghiglione, Alexandre, 2O
 Ghigo, M., 54
 Giard, E., 3Y
 Gibert, F., 3F
 Giesberts, M., 0J
 Giggenbach, D., 5N
 Gilbert, Teva, 2O
 Gill, P., 0J
 Gillard, William, 5M
 Gille, P., 4R
 Gilles, F., 3V
 Gimenez, Jean-Luc, 4J
 Glastre, W., 4H
 Gleeson, Danny, 5E
 Glier, Markus, 1D, 24, 26
 Gnata, Xavier, 17
 Godard, Antoine, 1V
 Godenir, A. M. R., 26, 4S
 Goepel, Michael, 4O
 Gohlike, M., 3V
 Goislard de Monsabert, Thomas, 50
 Gomez de Castro, A. I., 2A
 Goncharov, A., 33, 35
 González, D., 3P
 Gonzalez, F., 0T
 Gonzalez-Elias, Antonio, 56
 Gonzalez-Guerrero, M., 16
 Gorju, Guillaume, 1V
 Görth, A., 3V
 Götz, D., 0T
 Gousset, S., 4U
 Goy, M., 32, 33, 35
 Grabarnik, S., 4C
 Grabowski, K., 04
 Gramens, S., 0Q
 Gravrand, Olivier, 3Z, 40, 42
 Greger, R., 2U
 Gregory, M., 5I
 Greulich, P., 3O
 Griffin, M., 4C
 Grigore, O. V., 5X
 Groß, Silke, 1W
 Gruet, F., 55
 Grupp, Frank U., 0V, 5M
 Grzesik, Andreas, 44
 Guehne, Tobias, 39, 4G
 Guelhan, A., 0Z
 Guenther, B., 3V
 Guérandel, Stéphane, 43, 5I
 Guérineau, N., 0W, 3D, 4U
 Guerrieri, S., 2O
 Guibaud, G., 5I
 Gulde, S., 1J, 2F
 Günthner, K., 3O
 Gutierrez, B., 2T
 Gütlich, B., 3O
 Haddad, E., 0Z, 19, 5S
 Hager, P., 3V
 Hahn, S., 0P
 Haiml, M., 4I
 Hanna, S., 4I
 Hannoteau, F., 5S
 Hargrave, P., 4C
 Harnisch, Gerd, 04, 4M
 Hartung, J., 5T
 Hasekamp, Otto, 1O
 Haspeslagh, L., 2O, 2P
 Hauf, H., 50
 Hauptvogel, M., 13
 Hauschmidt, H., 2V
 Haverdings, M. B., 10
 Hayes-Thakore, C., 5C
 Heese, C., 1U, 2T, 2W
 Heider, Brian, 2I
 Heine, Frank, 2V, 3K, 3L, 3O
 Heinecke, D., 0K

- Heinzel, G., 3V, 45
 Hélière, A., 1Q
 Hellin, M.-L., 4V
 Henderson, P., 52
 Henry, David, 4Z
 Heo, Haengpal, 0D
 Herding, M., 0J, 0K, 3V
 Hering, M., 3A
 Herper, M., 0J
 Hey Tow, K., 0I
 Hippeler, M., 1U
 Hoekman, M., 21
 Hoersch, Bianca, 0B
 Hoffmann, H.-D., 0P
 Holleville, D., 53
 Hotyszko, J., 54
 Honniball, Arthur, 0Y, 5E
 Honold, Hans-Peter, 2I
 Hoogeveen, Ruud W. M., 3B, 57
 Hornaff, M., 0Q
 Hou, Lizhou, 1K
 Howard, Joseph M., 29
 Huang, Ting-Ming, 4X
 Huang, Wei, 0G
 Hubbard, Wendy, 2N
 Hudec, R., 0U, 4D
 Hughes, A., 4C
 Hugot, Emmanuel, 25, 4Y, 4Z
 Human, J., 30, 5Z
 Hurni, Andreas, 0Y, 11
 Ibrahim, Selwan K., 0Y, 5E
 Imperiali, Stephan, 3P
 Inneman, A., 4D
 Irizar, J., 2F
 Ismail, S., 1R
 Isola, Claudia, 0B
 Issler, J.-L., 4B
 Ivanov, T., 1U
 Jahn, Wilfried, 4Y, 4Z
 Jamin, Nicolas, 3Z
 Jansen, R., 1N
 Jerram, Paul, 2N
 Jiménez, J. J., 16, 5A, 5B
 Jimenez, J. J., 5J
 Johnson, M., 0A
 Johnson, M., 4Q
 Johnson, Steven, 2N
 Jomni, Cyril, 5M
 Jones, L., 3C
 Jung, Junpyung, 0D
 Kahanov, E., 2L
 Kalies, Alexander, 07
 Kalinnikov, Yurii K., 1M
 Kalkowski, G., 04
 Kaltenbach, V., 3L
 Kamiya, Tomohiro, 4K
 Kamm, A., 02, 0Q, 32, 5V, 5W
 Kammann, E., 4R
 Kang, Gmsil, 0D
 Karafolas, N., 19, 5S
 Katsir, D., 15
 Kazakov, T., 3P
 Kechagias, Marios, 1B, 58
 Kehayas, Efstratios, 1B, 52, 58
 Keim, Cornell, 1L, 4G
 Ketchazo, C., 3D
 Khan, I., 3O
 Kheyrandish, H., 1U
 Kiasaleh, Kamran, 2R
 Kiemle, Christoph, 1W
 Kiewe, B., 0K
 Killow, Christian J., 3W, 45
 Kintziger, Christian, 36
 Kitamoto, Kazuya, 4K
 Klein, S., 5F
 Klop, W. A., 5Z
 Klossek, Andreas, 4O
 Kochem, G., 5F
 Koechlin, C., 0Q
 Koegel, H., 0J
 Kolb, F., 0M
 Kolev, Dimitar, 2X, 47, 4A, 4B
 Kolm, M. G., 1J
 Kolmeder, J., 26, 4S
 Kopf, T., 5V
 Korablev, Oleg, 1M
 Korendyke, C., 4V
 Kovacs, Z., 18
 Koyama, M., 0S, 0S
 Koyama, Yoshisada, 2X, 49, 4A
 Kraft, S., 0F, 2H
 Krakowski, M., 0N, 5F, 5I
 Krauser, Jasper Simon, 1L
 Kremer, Philipp, 5O
 Krol, Hélène T., 3I
 Kroneberger, Monika, 2H, 4O
 Krutz, D., 37
 Kruzelecky, R. V., 0Z, 5S
 Kubo-oka, T., 2X
 Küchel, M., 4S
 Kuiper, Hans, 27
 Kuiper, S., 30
 Kuisl, A., 26, 4S
 Kundé, J., 3L
 Kunimori, Hiroo, 2X, 49, 4A
 Kuo, Jen-Chueh, 4F
 Kuperman-Le Bihan, Quentin, 05
 Labate, D., 2H
 Lacan, J., 48
 Lafont, Ugo, 12
 Laghezza, F., 5L
 Lajoie, Charles-Philippe, 25
 Landragin, A., 3U
 Lang, D., 2H
 Lange, N., 35
 Languy, F., 4N
 Lani, Sébastien, 0X
 Lapauw, L., 2J
 Larnaudie, Franck, 0D
 Lasfargues, G., 3F

- Latry, Ch., 3X, 5H
 Latunde-Dada, K., 21
 Laubier, D., 2Y
 Laureijs, R., 4C
 Laveille, T., 4U
 Lavenac, Jérôme, 3Q, 4J
 Leboulleux, Lucie, 25, 2Z
 Lecallier, Arnaud, 4P
 Le Coarer, E., 2D, 4U
 Lecomte, S., 5U
 Le Courer, E., 0W
 Le Duigou, J. M., 0T
 Leeuwis, H., 21
 Lefebvre, Michel, 1V
 LeFevre, A., 1Q
 Lefèvre, G., 3U
 Le Goff, R., 53
 Leibeling, G., 02
 Leijtens, J., 3G
 Leinse, A., 21
 Le Kernec, A., 1Y
 Lemarquis, F., 1G
 Lemke, Norbert, 0Y, 11, 4G
 Leonhard, N., 3J, 5V
 Lepennec, Y., 4C
 Leplan, Hervé, 1I, 3S
 Leriche, B., 4C
 Leroy, Cédric, 3Z
 Le Targat, R., 53
 Lettner, M., 26, 4S
 Leuchs, G., 3O
 Levelt, P. F., 1N
 Leveque, Thomas, 53, 5G
 Levillain, Y., 2F
 Li, Tuotuo, 0G
 Lian, Huadong, 0G
 Liebherr, T., 0K
 Lien, Chun-Chieh, 4X
 Lieser, M., 45
 Lin, Yen-Chih, 1C
 Lin, Yu-Chuan, 4X
 Ling, Jer, 4F
 Lintz, Michel, 5G
 Lisi, F., 34
 Liu, Ren-Young, 1C, 5P
 Lobre, C., 40
 Logan, R. T., 22
 Loicq, Jérôme, 36
 Longval, Y., 4C
 López, D., 3P
 Los, A., 3G
 Löscher, A., 2C
 Lovelock, P., 0J
 Ludewig, A., 3B
 Lumeau, Julien, 1F, 1G
 Luntama, J. P., 0F
 Luquet, Philippe, 0D
 Luttmann, J., 0P
 Lutzer, Michael, 3K
 MacDougall, J., 52
 Maciaszek, Thierry, 38, 4J
 Maestre, S., 4C
 Maffei, B., 4C
 Magnaval, J., 1Y
 Magrin, D., 18, 34
 Mahlein, M., 41
 Mahrdt, C., 3V
 Maignan, M., 5U
 Mammez, Dominique, 1V
 Manolis, Ilias, 14
 Mao, Ming-Hua, 1C
 Marchis, F., 2G
 Marcotte, S., 4V
 Maresi, L., 4T
 Mariën, J., 1Z
 Marini, A., 09, 5Q
 Marquardt, Ch., 3O
 Marque, J., 4H
 Marquet, B., 01
 Maršíková, V., 4D
 Martaud, E., 53
 Martens, T., 3R
 Martignac, J., 4C
 Martijn, H., 3Y
 Martin Pimentel, Patricia, 3K
 Martin, B., 5J
 Martin, I., 16, 5B
 Martin, Laurent, 4J
 Martinez-Oter, J., 5J
 Martin-Ortega, A., 5J
 Marty, C., 4C
 Marty, W., 4C
 Masi, S., 4C
 Maszkiewicz, M., 23
 Mathieu, K., 1G
 Matthey, R., 0I, 55
 Maurer, R., 1J
 Maurice, N., 4B
 Maurice, S., 0O, 2K
 Maurice, S., 2J
 Mavrocordatos, C., 0C
 Mayer, Frédéric, 2N
 Mayer, R., 4S
 Mazoyer, J., 2Z
 Mazy, E., 0I, 4V
 McCabe, K., 2K
 McCue, Raymond, 0Y
 McKenzie, Iain, 0Z, 19, 5S
 Meijer, Y., 2C
 Melicher, Milos, 5E
 Melkonian, Jean-Michel, 0L, 1V
 Mellab, K., 2T
 Mena, M., 5S
 Mende, Stephen B., 36
 Mengual, T., 59
 Mercier, K., 0T
 Mestre, N., 5I
 Mestre, Q., 50
 Meuris, A., 0T
 Meyer, Rolf, 3K, 3L

- Meynarts, G., 20
 Meynart, Roland, 14, 2E
 Mezger, Andreas, 24
 Micalizio, Salvatore, 43
 Micela, G., 4W
 Michau, Vincent, 25
 Michel, C., 4T
 Middleton, Kevin F., 0R, 4W
 Mielec, N., 3U
 Migliore, R, 2S
 Milet, G., 55
 Millet, B., 1S
 Minardi, S., 3J
 Miravet, C., 09, 5Q
 Mirc, F., 4C
 Misawa, R., 4C
 Mizutani, Tadahito, 4K
 Moeller, Tobias, 07
 Mohaupt, Matthias, 32, 4M
 Mol, M., 4R
 Moll, Florian, 47, 5N
 Mondin, L., 1U
 Monsinjon, P., 0W
 Montel, J., 4C
 Montier, L., 4C
 Montmessin, F., 2J
 Moreau, Aurélien, 31
 Moreau, V., 3D, 40
 Moreau, V., 4T
 Moreno, J., 3P
 Morgante, G., 4W
 Morrissey, Q., 3C
 Mot, B., 4C
 Motos, A., 3P
 Mottaghabinab, A., 0V
 Mottini, S., 3I
 Moulin, Gaid, 4Z
 Mugnier, L., 3D
 Mulet, P., 3D
 Müller, C. R., 3O
 Müller, V., 3V
 Munemasa, Yasushi, 2X, 47, 49, 4A
 Murawski, Michal, 58
 Musha, Mitsuru, 0H, 3T
 Muylaert, J.-M., 0Z
 Myszkowiak, A., 4T
 Nakagawa, Ken'ichi, 0H, 0H
 Nakayasu, Tomonao, 06, 0S
 Naletto, G., 2M
 Napierala, Marek, 58
 Narbonne, J., 4C
 Nasilowski, Tomasz, 58
 Navarro, Ramon, 28, 57
 Navasquillo, O., 20, 59
 Naylor, P., 52
 N'Diaye, Mamadou, 25, 2Z
 Neiner, C., 2A
 Nevo, I., 2L
 Newell, R., 2K
 Nghiem, Jean, 3Y
 Nicklaus, K., 0J, 0K, 3V
 Nicklaus, K., 5W
 Nicot, J.-M., 4C
 Nieke, J., 0C
 Nieuwkoop, E., 30
 Nikitushkina, Liubov, 4Z
 Nobili, Anna M., 5K
 Nogueira, R. N., 1X
 O'Connor, Peter, 5E
 O'Dowd, John A., 0Y, 5E
 Ofer, O., 2L
 Ohl, R., 23
 Okamoto, Eiji, 2Q
 Okura, Yukinobu, 06, 0S
 Oldenbeuving, R. M., 21
 Onori, D., 5L
 Ording, B., 3B
 Orsell, E., 5R
 Otter, G. C. J., 1N, 39
 Oussalah, Meihdi, 1I
 Overtoom, T., 30
 Pace, E., 4W
 Pacheco, Jorge, 5O
 Pachot, Charlotte, 12
 Pagano, I., 18
 Pain, T., 4I
 Pajot, F., 4C
 Pamplona, Tony, 4J
 Panopoulou, Aikaterini, 11
 Papciak, L., 50
 Parès, Laurent P., 2K
 Pareschi, G., 54
 Pareschi, J., 3R
 Parillaud, O., 5I
 Park, Young-Je, 0D
 Parot, G., 4C
 Pasalodos, Santiago, 56
 Pascal, S., 03
 Pascal, Véronique, 1P
 Pascual, Luis, 56
 Paskevicius, V., 0L
 Pasternak, Frederick, 1P
 Patel, G., 5C
 Pavel, N., 5X
 Pęczek, A., 1X
 Pelisson, S., 3U
 Pelo, E., 0A
 Pelon, Jacques, 1V
 Peñate, L., 0N
 Penfornis, Y., 3R
 Peng, Tz-Shiuan, 1C, 5P
 Penka, D., 0V, 13
 Perdigues, J. M., 2V
 Pereira do Carmo, J., 1Q
 Pereira, Celeste, 11
 Perez Prieto, Lucia, 1L
 Perez, G., 2S
 Perez, P., 5I
 Pérez, R., 0O, 2J, 2K
 Pérez-Serrano, A., 5D, 5F

- Perlot, N., 3N
 Pérot, E., 4C
 Perret, L., 2Y
 Perreur-Lloyd, Michael, 3W, 45
 Perrin, Marshall D., 25, 2Z
 Perrot, N., 3E
 Perrott, R., 21
 Pertenaïs, M., 2A
 Pesch, Alexander, 07
 Peschel, T., 37, 5W
 Pesquita, V., 2T
 Peter, G., 18
 Petersen, M., 0I
 Petit, C., 4B
 Petousi, D., 1X
 Petros, M., 1R
 Pettinato, L., 2H
 Phillippe, C., 53
 Philipp-May, S., 3O
 Philips, T., 2E
 Phung, Duy-Ha, 4B, 5G
 Piazza, D., 0A, 18
 Pica, M., 1Y
 Pidancier, Patricia, 3Z
 Piegari, Angela, 1H
 Pierot, Dominique, 3Q, 5Y
 Pimentao, J., 4C
 Pína, L., 4D
 Pinna, E., 34
 Piqueras, M. A., 20, 59, 5U
 Pisani, Marco, 3I, 5K
 Pisano, G., 4C
 Plesseria, J.Y., 01, 18
 Poenariu, V., 19
 Polo, V., 5U
 Pommerol, A., 0A
 Pons, M., 38
 Ponthieu, N., 4C
 Porte-Proust, F., 2V
 Porterat, D., 50
 Portier, Benjamin, 1I
 Portuondo-Campa, E., 5U
 Pradal, Fabien, 1I
 Pranyies, P., 4L
 Pratlong, Jérôme, 2N
 Prevost, E., 4I
 Prieto, Éric, 38, 5M
 Probst, A.-C., 1E
 Proserpio, L., 1E
 Prugniaux, M., 0W
 Pueyo, Laurent, 25, 2Z
 Puget, R., 0W
 Pulcino, V., 2S
 Puschmann, K. G., 0F
 Putzer, Philipp, 0Y, 11, 46
 Quatrevale, M., 5D
 Rabou, P., 2D
 Ragazzoni, R., 18
 Rahmouni, Christophe, 3P
 Ramirez, Julio, 5O
 Rarity, J. G., 5D
 Ravel, K., 08
 Raybaut, Myriam, 1V
 Réess, J.-M., 2J, 2K
 Refaat, T. F., 1R
 Rein, Fabian, 47
 Reinert, Thido, 0E
 Reinlein, C., 32, 33, 35, 3J, 5V
 Reitebuch, Oliver, 1W
 Remisova, K., 0U
 Renard, Elisabeth, 1D
 Ribes-Pleguezuelo, P., 0Q
 Ribet-Mohamed, I., 3Y
 Riccardi, A., 34
 Ricci, F., 5S
 Richert, M., 08
 Richter, Ines, 3K, 3L, 3O
 Rider, Kodi, 36
 Riede, W., 1U
 Riedel, J., 0M
 Rietjens, Jeroen, 1O
 Riou, I., 3U
 Risso, S., 04, 37, 5T
 Rissone, A., 48
 Ristorcelli, I., 4C
 Rivas, J., 5J
 Robbelein, J., 2P
 Roberston, David I., 3W
 Robert, C., 4B
 Robertson, D. I., 45
 Robinson, S., 2K
 Rochow, C., 2V
 Rodenhuis, Michiel, 57
 Rödiger, J., 3N
 Rodríguez Alija, A., 09
 Rodríguez, G., 3P
 Rodriguez, J. B., 3Y
 Rodriguez, J. M., 5U
 Rodriguez, L., 4C
 Roelkens, G., 1Z
 Roeloffzen, C. G. H., 21
 Roloff, V., 0A
 Romer, A., 5I
 Roner, Markus, 0Y
 Rosenkranz, W., 5I
 Rosmeulen, M., 2P
 Rossin, C., 03
 Rößler, M., 0M
 Rothman, J., 3F, 40
 Roucayrol, L., 0O
 Roudil, G., 4C
 Rowlands, N., 23
 Ruch, E., 3S
 Rugi, E., 4Q
 Russchenberg, T., 30
 Saccoccia, M., 4C
 Saiki, Naoya, 2Q
 Saint-Georges, P., 4N
 Saito, K., 0S
 Salatino, M., 4C

- Sallusti, M., 1J
 Salter, M., 5C
 Samain, E., 4B
 Sanchez, J., 09
 Sanchez, P., 03
 Sanchez-Brea, L. M., 5B
 Sang, Bernhard, 26, 2I, 44, 4S
 Sangar, A., 50
 Sanjuan, J., 3V
 San Juan, J. L., 3P
 Santos, C., 09, 5Q
 Sarajlic, M., 3H
 Sarasa, P., 2V
 Sarrazin, P., 2G
 Saucke, Karen, 3K, 3L, 3O
 Sauvage, J.-F., 2Z
 Sauvage, M., 3R
 Savin De Larclause, I., 1G
 Savini, G., 4C
 Schaefer, S., 51
 Schafer, H., 0K
 Schilt, S., 0I
 Schirmacher, W., 41
 Schleisiek, K., 0K
 Schmeissner, R., 5I
 Schmidt, Christopher, 47, 5N, 5O
 Schmidt, S., 3G
 Schmülling, Frank, 17
 Schreiber, T., 0M
 Schröder, H., 1U
 Schröder, S., 13
 Schuster, S., 45
 Schütze, D., 3V
 Schwarze, T. S., 45
 Schweyer, Sebastian, 46
 Schyns, E., 2G
 Scotti, F., 5L
 Sebastian, I., 37
 Seel, S., 3O
 Sell, A., 0J
 Sellier, C., 3E
 Semerjyan, Vardan, 5O
 Semprimoschnig, Christopher, 1D
 Sequies, T., 0W
 Serrano, J., 3P
 Sheils, David, 0Y
 Shfaram, H., 15
 Shi, W., 19
 Shiloah, N., 2L
 Shimo-oku, Ayumi, 0H
 Shin, Sangyoun, 0D
 Shrestha, Amita, 47, 5N, 5O
 Sierk, B., 2C
 Simioni, E., 2M
 Simon-Boisson, C., 0O
 Simonella, O., 4C
 Simpson, Robert, 2N
 Singh, U. N., 1R
 Sironi, G., 54
 Skegg, M., 2F
 Smit, Martijn, 1O
 Smith, D. J., 1J
 Sodnik, Z., 2T, 2V, 2W, 3L
 Soltau, D., 3L
 Sordet, M., 3H, 4E
 Sornig, Michaela, 24, 26, 2I, 44, 4S
 Sosnicki, O., 4I
 Sotom, M., 19, 1Y, 59
 Soummer, Rémi, 25, 2Z
 Spruit, H., 30
 Spühler, G., 5U
 Stampolidis, Leontios, 1B, 52, 58
 Stede, G., 3V
 Steller, M., 18
 Stiller, B., 3O
 Stockman, Yvan, 0I, 36, 4T, 4V
 Stollenwerk, M., 1E
 Stone, Bryan D., 29
 Straif, Christoph, 0E, 2I
 Stumpf, M., 2U
 Südmeier, T., 0I
 Suematsu, Y., 0S
 Sugawara, Jun, 4K
 Sukegawa, Takashi, 06, 0S
 Suzuki, K., 2X
 Sytchkova, Anna, 1H
 Taccola, Matteo, 2B, 2H, 4T
 Tagliaferri, G., 54
 Tagziria, K., 0Z, 19, 5S
 Taha, M., 0K
 Taifi, A., 2H
 Takenaka, Hideki, 2Q, 2X, 47, 4A
 Tanguy, F., 4L
 Tapie, P., 4C
 Tauber, J., 4C
 Taubmann, G., 09, 5Q
 Tauziede, L., 42
 ten Bloemendaal, D., 3B
 Thernisen, A., 4V
 Thévenaz, L., 0I
 Thibault, D., 1U
 Thiebaut, C., 3X, 5H
 Thiele, H., 0V, 3A
 Thomas, N., 0A, 4Q
 Thomassen, L., 1Z
 Thomin, Stéphane, 4P
 Thompson, K., 2G
 Thöt, R., 4I
 Tighe, Adrian, 1D
 Todd, Michael, 0Y
 Toet, P. M., 1N
 Tonck, Laurence, 4P
 Torbet, M., 3C
 Torre, J.-P., 4C
 Toubhans, I., 4L
 Toulemon, Y., 1Q
 Toyoshima, Morio, 2Q, 2X, 47, 49, 4A, 4B
 Traub, M., 5F
 Tréma, Thierry, 0B
 Tricot, François, 43

- Triebel, Peter, 07
 Tröbs, M., 45
 Troendle, D., 2V
 Trokhimovsky, Alexander Y., 1M
 Tromp, N., 28
 Tröndle, Daniel, 3K, 3O
 Trost, M., 13
 Tsay, Ho-Lin, 4X
 Tucker, C., 4C
 Tünnermann, A., 0M, 0Q, 33, 5W
 Ubierna, Marcos, 56
 Uittenhout, J., 3G
 Ulfers, Hendrik, 4O
 Uvin, S., 1Z
 Vachey, M., 2A
 Valsecchi, G., 3R
 van Amerongen, Aaldert H., 1O, 57
 van Brug, Hedser, 1O, 5Z
 Vandenberg, J.-F., 4N
 van der Meulen, Wencke, 1O
 van der Wal, L. F., 1N
 Van Dijk, F., 0N, 5F
 Van Dijk, P. W. L., 21
 Van Esbroeck, K., 2O
 Van Gasse, K., 1Z
 van Leest, T., 10
 van Loon, Dennis, 1O
 Van Olmen, J., 2O
 Van Papendrecht, G., 1U
 van Riel, M., 30
 van Wakeren, J. M. O., 1N
 Vanwichelen, K., 2O
 Vázquez, E., 3P
 Vecchi, G., 54
 Védrenne, N., 48, 4B
 Veefkind, J. P., 1N
 Venema, Lars, 57
 Verlaan, A. L., 5Z
 Vernani, D., 0A, 4Q
 Versepuuch, G., 4C
 Versluis, J., 4T
 Vialatte, A., 0W
 Viale, T., 3D
 Viard, Thierry, 0X
 Vignal, T., 50
 Villalba, P., 20, 5U
 Villera, M., 0N, 5F
 Vink, Ramon, 14, 28, 57
 Virmondois, C., 3E
 Visser, H., 5Z
 Vives, S., 03
 Vlemmix, T., 1N
 Voegt, S., 2S
 von Bandel, N., 5I
 von Finck, A., 15
 Voors, R., 3B
 Voss, K., 3V
 Voudouris, Liberis, 0Y
 Walker, Andrew, 2N
 Walker, R. G., 1A
 Wallner, Oswald, 0E
 Walter, I., 37
 Walter, P., 2G
 Waltham, N., 3C, 5C
 Wang, Lon A., 1C
 Wang, Weigang, 0G
 Wang, X., 0J, 0K
 Wang, Z., 1Z
 Ward, Henry, 3W, 45
 Weber, H., 2F
 Wedler, Armin, 5O
 Weickman, A., 4I
 Weidinger, Matthias, 17
 Weigel, T., 0A, 4Q
 Weise, Dennis, 1L
 Weiβ, K. M., 4R
 Wen, M., 1E
 Wernham, D., 1U
 Wheeler, R., 2E
 Wiegand, M., 2V
 Wiens, R. C., 2J, 2K
 Wildi, F., 18, 3H, 4E
 Wildschut, J., 30
 Wilkens, Ludger, 44
 Wille, Eric, 5O
 Williams, R. A., 0J
 Windmüller, M., 0M
 Winzer, G., 1X
 Wirth, Martin, 1W
 Witrock, U., 3R
 Wolf, P., 53
 Wu, Kun-Huan, 4X
 Wu, L., 2P
 Wührer, C., 1S
 Xompero, M., 34
 Xu, Pengmei, 1K
 Yasuda, Susumu, 4K
 Yevtushenko, A., 15
 Ygouf, Marie, 25
 Yong, Sangsoon, 0D
 Yu, J., 1R
 Yun, Peter, 43
 Zamkotsian, Frederic, 0X
 Zanatta, J. P., 40
 Zanutta, A., 5R
 Zech, H., 3O
 Zeitner, U. D., 02, 04, 13, 4M
 Zender, B., 3V
 Zheng, Sheng-Hai, 23
 Zhou, Yi, 1A
 Ziegler, Bent, 11
 Ziethe, R., 0A, 4Q
 Zimmermann, L., 1X
 Zohar, G., 2L
 Zorita, D., 09, 5Q
 Zucco, Massimo, 3I, 5K
 Zukauskas, A., 0L
 Zwetz, M., 45