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In Memoriam, Richard G. (Rick) Lyon

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On January 24, 2016, the optical sciences community lost one of its most productive and well-regarded colleagues when Richard G. (Rick) Lyon succumbed to complications resulting from a liver transplant.

Rick was an optical scientist in the Exoplanets and Stellar Astrophysics Laboratory at NASA Goddard Space Flight Center. Rick began working at NASA as a scientist in the Center of Excellence in Space Data and Information Sciences program, during which time he investigated techniques of maximum entropy deconvolution, phase retrieval/diversity, and imaging interferometry, and studied scientific processes of symbiotic stellar jet systems. After becoming a civil servant, he worked on several astronomical instrument concepts. Rick's primary interest was enabling the study of exoplanets. He was a vital member of the community of astronomers and optical scientists working on high-contrast imaging techniques and proposing instrumentation for directly imaging exoplanets orbiting nearby stars. He was the project scientist for the Extra-Solar Planetary Imaging Coronagraph study team and the principal investigator for the Balloon Exoplanet Nulling Interferometer. Rick formed a laboratory group to develop a visible nulling coronagraph to use destructive interference for suppressing starlight and achieved record-setting contrasts using his active wavefront control technique.

Prior to his time at Goddard he was a member of the technical staff at Perkin-Elmer Corporation (now Goodrich). At Perkin-Elmer he proposed and developed approaches for aligning HST prior to its launch, and he similarly proposed phase retrieval as the method of aligning JWST when it was known as NGST. While at Hughes Danbury Optical Systems, Rick contributed to the HST Independent Optical Assessment Panel in the characterization of the conic constant error in



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the HST primary mirror. Rick was honored with numerous awards for this work, including NASA's Medal for Exceptional Service in 2004, three NASA Group Achievement Awards, four Goddard Special Act Awards, and the James Kerley Award from the GSFC Technology Transfer Program in 2012.

He is survived by his wife, Karen; two sons, Keith Murray and Jack Dean; three siblings; four grandchildren; and many aunts, uncles, nieces, and nephews.