

Learn more about Mark “Indy” Kochte:

Knowing that astronomy and space exploration was in his future during the first week of his 8th grade Earth Science classes, Mark ‘Indy’ Kochte went on to obtain a degree in astronomy from The Ohio State University in 1987. In 1988 he joined the Hubble Space Telescope project at the Space Telescope Science Institute in Baltimore, Maryland, doing the acquisition, processing, and archiving of Hubble data. During his time with the project, Indy was afforded the opportunity to do research on extrasolar planets and helped define the evidence of an atmosphere around the first known transiting planet in the star system HD 209458b. He also was heavily involved in the grassroots project UMBRAS, a spacecraft design that would enable space telescopes to actually visually detect extrasolar planets the size of Jupiter or Saturn.

After 17 years with Hubble, Indy moved on to the Far Ultraviolet Spectroscopic Explorer project (FUSE) as a Mission Planner, taking on the immense challenges of how to deal with a satellite that has only one remaining reaction wheel (the other three, you see, having failed since launch). In the fall of 2006 he was offered the opportunity to join the MESSENGER team at the Johns Hopkins University Applied Physics Lab as a Payload Operations Specialist for the Mercury Atmospheric and Surface Composition Spectrometer instrument (MASCS).

Since joining the Mission, he supported two successful flybys of Venus and three exciting flybys of Mercury during the Cruise Operations of the spacecraft. In March 2011, Indy and the rest of the team transitioned to Mercury Orbital Operations when MESSENGER became the first ever spacecraft to orbit the planet Mercury. Shortly after he took on the role of Mission Planner and his duties expanded from not only generating the command sequences for the MASCS instrument, but for generating the weekly command loads of daily activities for the spacecraft as a whole.

Recently Indy has become involved with the New Horizons Mission as one of the sequencers for the Solar Wind Around Pluto (SWAP) instrument. Throughout his tenure in space mission operations, Indy has published a half a dozen papers on spacecraft design and mission operations, as well as co-authored a half a dozen additional papers on spacecraft design, mission operations, and science analysis results.

Not being an all-work/no-play kinda guy, in his spare time, when not staring at the stars, Indy can be found out exploring our planet. In addition to having authored the rock climbing guidebook “Climb Maryland!”, he is often out scaling cliffs from Maryland to Thailand, mapping cave systems in West Virginia, mountain climbing in Colorado, California, Washington and Wyoming, diving for fossilized Megalodon shark teeth (or to just look at the pretty fish) in the Atlantic or Caribbean, working on various time-lapse and astro-lapse photography projects, or generally capturing moments in time by photographing the world we live in. No moss gathers under his feet!