Bozeman Public Library Foundation Presents:

Gallatin Valley Forum on April 29, 2009

Dr. Joe Shaw – Preserving the Big Sky at Night and Montana Optical Technology

Dr. Joe Shaw likes to photograph and look at the night sky. The relatively low level of “light pollution” in the Gallatin Valley makes it a rare place where constellations, auroras, comets, and other atmospheric and space phenomena can be observed without going large distances from home. But as an MSU professor and director of the Optical Technology Center, watching the night sky is much more than just a pastime.

Join the Bozeman Public Library Foundation for the third Gallatin Valley Forum featuring Dr. Shaw discussing how he develops optical sensors and uses them to explore the natural Earth’s environment. “From infrared imaging of clouds to laser detection of fish, optical remote sensing helps answer intriguing scientific questions while providing fascinating engineering challenges,” according to Shaw. The program will take place on Wednesday, April 29, 7pm at the Bozeman Public Library, free and open to the public.

“One of my favorite things to do is photograph and study optical phenomena in nature,” said Shaw. “I watch the sky for interesting colors, halos, coronas, iridescence, aurora, or whatever Mother Nature offers.” This interest has helped establish an active research program at MSU involving development and application of novel optical sensing systems for applications that range from climate studies to military surveillance. This is just one part of a much larger set of research activities that has made Bozeman a widely recognized center of excellence for optics and laser technology with a thriving combination of academic researchers and small businesses.

Dr. Shaw is a Bozeman native, but his education and career took him on a trip through the Rocky Mountains with a B.S. from the University of Alaska, a Master’s from University of Utah, and his Ph.D. from the University of Arizona in Optical Sciences. He worked at the Environmental Technology Laboratory, which is a research component of the National Oceanic and Atmospheric Administration (NOAA), in Boulder, Colorado from 1989 until 2001.

“A NOAA fellowship gave me the chance to study at the renowned Optical Sciences Center in Tucson, Arizona, where I earned my Ph.D. with a dissertation on laser remote sensing,” according to Shaw. “In 2001 I joined the faculty at Montana State University ... back home in Bozeman.”

The Gallatin Valley Forum, sponsored by the Bozeman Public Library Foundation, offers stimulating discussions and audience participation on a variety of public issues topical to this community and beyond. For more information, please call Paula Beswick in the Foundation office at 582-2426.

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