

**Jon E. Hakkila**  
**Physics and Astronomy**

**2012 Distinguished Research Award**



Jon Hakkila received a B.A. from the University of California at San Diego with majors in Physics and English/American Literature, and M.S. and Ph.D. degrees in Astronomy from New Mexico State University. He taught for 14 years at Minnesota State University before coming to the College of Charleston as Professor and Department Chair of Physics and Astronomy in 2000. As of June 2012, he has published 39 refereed papers, 4 books and book chapters, 61 conference proceedings, 1 popular article, and 56 published abstracts, and has received 37 externally funded grants (primarily from NASA and NSF) for \$1,969,283. His research methodologies involve the detection and classification of astronomical objects (using data mining and statistical tools), the role of instrumental biases and selection effects in time series analyses, and analysis of global distributions of galactic and cosmological astronomical sources. He has used these tools to study cosmic gamma-ray bursts, which are energetic, beamed supernova explosions. Dr. Hakkila has been involved in the discovery that gamma-ray bursts are the most luminous objects in the universe, he has used data mining tools in gamma-ray burst classification, and he has played a key role in exploring the pulsed nature of gamma-ray burst emission. In addition to these activities, he is an active participant in SONG (the Stellar Observations Network Group) and 50BiN; these are projects that use whole-Earth telescopes to study stellar oscillations and search for extrasolar planets around nearby stars). He is also a member of LSST's (the Large Synoptic Survey Telescope's) astrostatistics and astroinformatics working group.