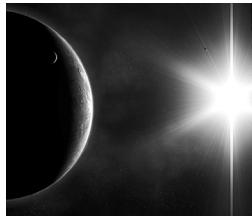


NATURAL SCIENCES

Cosmic Puzzles

Jim O'Leary

Session I Monday, 9:30 a.m.
Fee: \$65 (begins March 5)



Explore the lingering mysteries of our cosmos from our solar system to the vast expanse of the universe. We will begin on Earth exploring how we slowly discovered our place in—and the vastness of—the universe. Then we will look at Mars, the planet most like Earth, which once had oceans of water like our own. What happened to this once blue planet to turn it into a dry, cold desert? Other mysteries include the tipped-over planets Venus and Uranus, the frigid world, Europa, that surprisingly conceals a global ocean of water, and the always-intriguing “dwarf” planet, Pluto. Puzzling topics beyond our solar system include the super-massive black hole lurking at the core of our Milky Way galaxy, the new discovery of hundreds of planets in other solar systems, the origins of the galaxies, the baffling discoveries of dark matter and dark energy, and the current research into the origin and ultimate fate of the universe itself.

Jim O'Leary is senior director of the Maryland Science Center (MSC) and co-host of WYPR's weekly Skywatch program. He develops Earth and space science programs for the MSC's Davis Planetarium, IMAX Theater and Crosby Ramsey Memorial Observatory. He regularly appears on radio and television as an astronomy expert and has undertaken many programs with the National Oceanic and Atmospheric Administration, Space Telescope Science Institute, National Science Foundation and NASA.



Physics of Everyday Life

Eddie Loh

Session I Wednesday, 11 a.m.
Fee: \$65 (begins March 7)



'My heart leaps up when I behold / A Rainbow in the sky: . . .'
William Wordsworth, 1802

This course will examine phenomena encountered in everyday life such as “the blue sky at noon,” “reddish sky at sunset,” “white clouds,” and “beautiful colors of a rainbow,” all from a physics perspective. We will start with discussion of the historical development of our understanding of light and move on to see how images are formed in the eye and how the principle of optics is used in cameras, telescopes and DVDs. Finally, we will concentrate on waves and explore the physics that unifies oscillating slinkys, ocean waves, light waves, sound waves and electromagnetic radiation. The emphasis of the course will be not on problem-solving but on encouraging students to understand and appreciate their environment from a new perspective.

Eddie Loh, Ph.D., recently retired as professor of Physics at Towson University, where he taught full-time for 41 years. He holds a B.S. in Physics from Virginia Tech and a Ph.D. in Physics from the Johns Hopkins University. He served as department chair for over 20 years. Loh has always been interested in teaching physics to non-science majors not only for its beauty but also because physics plays an important societal role in health, economic development, education, energy and the environment. He has developed two such courses, one being “How Things Work,” and has taught an array of other courses in general education, electronics, microcomputers and physics.

NO CLASS CONFIRMATIONS WILL BE SENT

Classes are held at 7400 York Road
Suites 100 and 108
Free, accessible parking
(See maps in catalog)