



**FOR IMMEDIATE RELEASE**

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## **American Physical Society Invites Milwaukee to Discover Plasma**

*Free science events expected to draw thousands.*

MILWAUKEE, Wis.—The Plasma Sciences Expo—planned as the biggest celebration of plasma physics in the country—presents teachers, students and the public with a free opportunity to explore what scientists call “the 4<sup>th</sup> state of matter.”

A plasma is a gas so hot its atoms break apart into charged particles. Plasma is the energy source of the sun and other stars, and scientists around the world are researching how to use plasmas to harness that same power on Earth. Matter in the plasma state makes up 99 percent of the visible universe. Our sun, stars, the Northern Lights, solar flares and lightning bolts are all examples of naturally occurring plasmas. Man-made plasmas are used for lighting (fluorescent lights), sterilizing medical equipment, welding, manufacturing computer chips, producing energy by fusion and medical surgery procedures.

From Oct. 23 to Oct. 27, more than 1,500 plasma scientists will be gathering for the American Physical Society’s Division of Plasma Physics 59th Annual Meeting. At the Wisconsin Center, plasma scientists will staff exhibitor booths to excite students and the public about science, research and technology in the “hot” career field of plasma physics.

The Plasma Sciences Expo will be open to school groups on Oct. 26 and 27 from 8 a.m. to 2 p.m., and to the public on Oct. 26 from 6 to 8:00 pm. The Expo is a free event sponsored by the American Physical Society’s Division of Plasma Physics and the U.S. Department of Energy.

“The event will be entirely hands-on,” says Arturo Dominguez, the Education Outreach Chair for the Division of Plasma physics. “You will be able to create arcs of lightning, manipulate glowing plasma with magnets, and wear special glasses to observe colors made by various plasmas.” Participants can also observe their body temperatures on a monitor, create a cloud in a chamber, explore lasers, and enjoy the hair-raising experience of a Van de Graaff generator.

In addition to the Expo, local teachers are invited to attend Science Teacher Day at the Hilton Milwaukee City Center on Tuesday, Oct. 24 from 8 a.m. to 4 p.m., where they will spend the morning learning about the fundamentals of fusion energy and plasma science. The remainder of the day is spent in workshops of their choosing, focusing on subjects like the nature of matter, cosmology, mechanics, lasers, the electromagnetic spectrum, and Newton’s Laws. The workshops align with national science standards and

Milwaukee academic standards. There is no charge for this event, but online registration is required and available on the event website at <http://fused.gat.com/dppoutreach/>. Science Teacher Day includes parking and lunch at no cost to participants.