



Association for Women In Science  
Philadelphia Chapter

## October 2009 Meeting

### Surveying the Earth with Neutrinos

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Assistant Professor, Department of Physics  
Drexel University

Four and half billion years after its formation, our planet is still very hot, with the interior still composed of hot liquid material. Uranium and thorium are believed to provide the heat source that keeps our planet warm for such a long period of time. The KamLAND experiment in Japan has made the first ever experimental measurement of the amounts of uranium and thorium inside the Earth by measuring the flux of geological neutrinos emitted in the radioactive decay chains of both elements. Results of this measurement will be discussed, as well as the prospect of the future anti-neutrino observatory, Hanohano, which will take far more precise measurements of geological neutrinos. **Dr. Maricic will present her work in a scientific talk that will be accessible to non-physicists.**



**Date:** Thursday, October 15, 2009  
**Time:** 6:00 PM Check-In, Dinner (vegetarian selections will be available)  
7:00 PM Program  
**Location:** University Club, 6<sup>th</sup> floor, MacAlister Hall, corner of 33<sup>rd</sup> and Chestnut Streets  
**Cost:** \$13 AWIS Members  
\$15 Non-members  
\$10 Students & Postdocs  
**RSVP:** By 12:00 noon, Friday, October 9, 2009  
**Registration:** <http://www.awisphl.org/meetingregistration.htm>

**Preregistration is required** for security and admission to the building. All reservations will receive an e-mail confirmation from AWIS-PHL within 72 hrs. If you do not receive a confirmation, your reservation was **NOT** received, and you should contact [rsvp@awisphl.org](mailto:rsvp@awisphl.org) (preferred), or call Ellie Cantor 610-935-5455 (also for any questions about the reservation process or to cancel your reservation).

**Campus Map and Directions:** [http://www.drexel.edu/em/directions/map\\_uc.html](http://www.drexel.edu/em/directions/map_uc.html) MacAlister Hall is #9B

**Parking:** Parking is at your own expense. Metered on-street parking is generally available in the vicinity after 6 pm. There is a Drexel Parking Garage (#16 on the map) at 34<sup>th</sup> and Market (enter from Ludlow St). There is also a Penn Garage at 34<sup>th</sup> and Ludlow (<http://www.facilities.upenn.edu/map.php> – click the check-box for “show parking”), and there are some small public lots in the area.

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