Study Abroad in Germany

Nuclear Reactor Physics and Nuclear Reactor Lab

**Lecture-Syllabus:** Liquid Drop Model, radioactive decays, nuclear deformation, fusion and fission, nuclear reactor physics, nuclear reactor pro and cons.

**Lab-Syllabus:** Radiation hazards, safety, and dosimetry at TRIGA and MAMI, reactor control, gamma spectroscopy, neutron activation analysis, neutron flux measurement, operate a nuclear reactor, nuclear deformation.

**Course Description:**
- May Session 2008
- 500-level Physics
- PreReqs: PHYS 206/211, PHYS 207/212
- Credit Hours: 4
- Course fee € 500 (might be waived)

**Johannes Gutenberg Universität Mainz**
… was founded in 1477. With approximately 35,000 students from more than 130 nations, Johannes Gutenberg University ranks today as one of Germany’s largest universities and is the scientific and academic center of the state of Rhineland-Palatinate (Rheinland-Pfalz).

**Cost Estimate:**
- Flight US $800
- Youth hostel € 24 per night
- Excursion € 70 …
- Total costs about $2500

**Historic Excursion to Trier**

- Trier was founded 2050 B.C. by the Trebeta the son of Queen Semiramis.
- 16 B.C. the city Augusta Treverorum was founded by the Romans and is the oldest city of Germany.
- Under Diocletian in 285 A.D., Trier became one of the five capitol cities of the Roman Empire.
- Caesar Constantine the Great resided in Trier from 306 to 316 A.D. and enjoyed all the roman pleasures in places you still can visit today like the Amphitheater, the Basilika and the Imperial Baths.
- The Cathedral of Trier claims to have the original robe (Tunica Christi) that Jesus wore before he died.
- ... in 1818 Karl Marx was born in Trier … and in 1963 Ralf Gothe was born in Trier.

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