



KOÇ UNIVERSITY

## Science – Math Seminar

**Speaker:**

Dr. Bruno Viana  
Laboratoire de Chimie Appliquée de l'Etat Solide

**Date:** Thursday, Sept 29, 2005

**Time:** 16:45 (Tea and cookies will be served at 16:30)

**Place:** Science Building, Room Z42

**Title:** Development of Yb lasers and applications

**Abstract:**

The emergence of new laser crystals has allowed crucial progress in the high power laser (LULI in Orsay for instance and Megajoule programs in France) as well as for the ultrashort-pulsed laser technology. For instance in that field, extensive researches on new Yb<sup>3+</sup> doped crystals have allowed the development of all-solid-state femtosecond lasers. In the Yb<sup>3+</sup> solid state lasers, thermo-mechanical plays a key role. Thermo-optical and thermo-mechanical parameters are analyzed and structural-properties relationships could be expressed. The review of the state of the art on the Yb doped laser material for high power and ultrafast pulses generation will be presented.

---

Please visit <http://sci-math.ku.edu.tr/> for the schedule of upcoming Science - Math seminars.