



## Seminario de Geometría Diferencial y Topología

### ANUNCIO CONFERENCIAS

**Serge Lawrencenko**

**Título:** Open problems on irreducible triangulations

**Día:** 22 de Mayo de 2012

**Hora:** 11:30-12:30

**Lugar:** Aula 05 - Facultad de Matemáticas

**Resumen:** Some open problems on irreducible triangulations of closed, punctured, and pseudo surfaces will be addressed. Possible ways to attack those problems will be discussed.

**Título:** The spectrum for chromatic numbers of spinal quadrangulations

**Día:** 25 de Mayo de 2012

**Hora:** 11:30-12:30

**Lugar:** Facultad de Matemáticas

**Resumen:** The notion of a spinal quadrangulation will be introduced. Using quite an elementary method, it will be shown that for any pair of non-negative integers  $g$  and  $n$  so that  $n$  is greater than 1 and  $g$  is not less than the Betti number of the complete graph  $K_n$ , there exists a spinal quadrangulation of a closed orientable surface of genus  $g$  with chromatic number  $n$ . This is the quadrilateral analogue of a well-known result by Harary, Korzhik, and the speaker (1993) on triangulations cited in White's textbook. It also will be shown that the obtained spectrum of chromatic numbers is complete in the class of spinal quadrangulations. The notion of an interlaced  $n$ -cube, versus the usual  $n$ -cube, will be introduced and discussed.

**Reseña biográfica:** El profesor S. Lawrencenko es investigador de reconocido prestigio en las áreas de Matemática Discreta, Informática, Geometría y Topología. Actualmente pertenece a la Primera Cátedra de Matemática Superior de la "National Research University of Electronic Technology (MIET)" en Zelenograd, Moscú. (<http://Lawrencenko.ru>)