



**UNIVERSITÀ DEGLI STUDI DI PARMA**  
**COLLOQUIUM DEL**  
**DIPARTIMENTO DI MATEMATICA E INFORMATICA**  
CAMPUS - PARCO AREA DELLE SCIENZE, 53/A  
<http://www.dmi.unipr.it/colloquium>

Notizie

8 novembre 2016



**Martedì 15 novembre, ore 16:00**

**Prof. Alexander V. Bobylev**

Keldysh Institute of Applied Mathematics,  
Russian Academy of Sciences

Nell'ambito del Colloquium il **prof. Alexander V. Bobylev**, martedì 15 novembre alle ore **16,00** presso l'**aula A** del Dipartimento, terrà un seminario dal titolo:

**Maxwellian bounds for solutions of the spatially homogeneous Boltzmann equation**

Tutti sono invitati a partecipare

Proff. Adriano Tomassini, Alessandra Lunardi

*Abstract: The talk is based on a joint paper with Irene Gamba. We consider the spatially homogeneous Boltzmann equation and assume that the initial distribution function is bounded by a Maxwellian. A natural conjecture is that the corresponding solution is also bounded uniformly in time by another Maxwellian with constant parameters. The conjecture was considered earlier by several authors and finally it was proved for hard spheres and hard potentials with cut-off. The proof, however, does not work for pseudo-Maxwell molecules. We discuss related questions in the talk and present another way of proof, which can be applied to the Maxwell case.*

*Various aspects of the so-called "comparison principle" for the Boltzmann equations are also explained in the talk.*