ID de Contribution: **10** Type: **Non spécifié**

Instantaneous filling of the vacuum for Boltzmann gases in bounded domains

vendredi 24 novembre 2017 14:45 (30 minutes)

Let us think of a room divided into two compartments thanks to a sealed wall. One of the two compartments is empty and the other filled with a gas. What does happen when one removes the wall ? The mathematical answer to this question is that the gas will immediately spread into every single nook of the entire room.
In this talk I will present how to prove this behaviour in convex bounded domains from the Boltzmann equation. More precisely, I will give an overview of the analytic and geometric methods leading to the existence of a uniform exponential lower bound for solutions to the Boltzmann equation.

Orateur: BRIANT, Marc