COLLOQUIUM UNIVERSITY OF PITTSBURGH FRIDAY, MARCH 28, 2008

704 THACKERAY HALL 4:00 P.M.

PROFESSOR ANTONIN NOVOTNY

INSTITUTE OF MATHEMATICS
UNIVERSITY OF TOULON, FRANCE

SINGULAR LIMITS IN THE THERMODYNAMICS OF VISCOUS FLUIDS

ABSTRACT: In this overview lecture we shall speak about:

- 1) Weak formulation and existence of weak solutions to the complete Navier-Stokes-Fourier system of equations describing the viscous compressible and heat conducting fluids.
 - 2) Some of its scaling properties.
 - 3) Some of its singular limits including low Mach and low Froude numbers...

Refreshments served at 3:30 p.m. in the Math Dept. COMMON ROOM, Thackeray 705