THE UNIVERSITY   OF HONG KONG

Institute of Mathematical Research
Department of Mathematics

C O L L O Q U I U M

Heat Flow Method in the Critical Point Theory

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Abstract

We study the heat flow for elliptic problems with variational structure, for example, the harmonic maps, the minimal surfaces, the prescribing mean curvature surfaces as well as some semilinear problems. In some cases when the Palais Smale condition fails, it is used as a replacement of the pseudo gradient flow in deforming the level sets of the energy functionals, so that the Morse theory is established, and then, some multiple solution results are obtained.

Date: December 12, 2008 (Friday)

Time: 4:00 – 5:00pm

Place: Room 517, Meng Wah Complex, HKU

All are welcome