DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, January 5
Padelford C-36
3:45 pm

Functions of bounded higher variation

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We define a class of functions that is a natural generalization of the space of functions of bounded variation, and we establish certain properties of these functions. In particular we prove a generalization of the classical theorem of De Giorgi on the rectifiability of sets of finite perimeter. We also discuss some connections between functions of bounded higher variation and questions about the asymptotic behavior of Ginzburg-Landau functionals.

(joint work with H.M. Soner)