Monday's Nonstandard Seminar 14

14:00

Author: Jan Kristensen (University of Oxford)

Title: **Gårding inequalities and their impact on regularity and uniqueness**

Abstract: It is well-known that minimizers of strongly quasiconvex variational integrals in general are neither regular nor unique. However, if a suitable Gårding type inequality is assumed for the variational integral, then both regularity and uniqueness can be restored for minimizers under a natural smallness condition on the boundary datum. In this talk we discuss these issues, various extensions, and how they are naturally connected to convexity of the variational integral on the underlying Dirichlet classes.

The talk is based on joint work with Judith Campos Cordero (Mexico City), Bernd Kirchheim (Leipzig) and Jan Kolar (Prague).