Steffen Fröhlich
On twodimensional nonlinear elleptic systems in Euclidean spaces \mathbb{R}^n

TIME:
5 Feb 2007, 16:00 - 18:00

LOCATION:
Freie Universität Berlin - Fachbereich Mathematik und Informatik
Arnimallee 2-6, 14195 Berlin-Dahlem (Raum 031)

We discuss selected results concerning the geometry and analysis of two-dimensional critical points of various variational problems. On the one hand, this implies the analytical and numerical construction of famous minimal immersions, of special compact immersions of constant mean curvature, and of Willmore-surfaces. On the other hand, we present classical methods to establish local estimates for gradients and curvature of various nonlinear elliptic systems. We infer some results of Bernstein type.

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