Welcome to the series of lectures

Tangent distributions and Sobolev surfaces

by

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April 27-April 30, Praha, MFF UK, Sokolovská 83.

The course focusses on the study of surfaces with weak regularity and their relationship with nonintegrable distributions of planes. Involutivity is a well known necessary condition for integrability of smooth tangent distributions. We show that this condition is still necessary for integrability with Sobolev surfaces. Motivations for this study come from the sub-Riemannian Geometry of the 3-dimensional Heisenberg group. Here we answer a question raised in a paper by Z.M.Balogh, R.Hoefer-Isenegger, and J.T.Tyson. The tools involved are classical and use elementary facts on rectifiability, Sobolev functions, weak jacobians and Sobolev forms.

Monday	**April 27**	**14:00 K9**
Tuesday	**April 28**	**12:20 K3**
Wednesday	**April 29**	**10:00 Žitná**

(Žitná = seminar room of the Mathematical Institute, Žitná 25, Praha 1, 3rd floor).

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On behalf of organizers   Jan Malý