



Centro de Matemática
Universidade do Porto

Dynamical Systems Seminar

Date. July 5, 14h30

Place. Room **M029**

Speaker. Sergey Zhukovskiy¹ (DEEC - FEUP)

Title. Covering Mappings. Theory and Applications.

Abstract. In the first part of the talk there will be introduced definitions of covering and locally covering mappings. A short review of the modern results in this area (such as coincidence points theorems and perturbation theorems) will be presented. The second part of the talk is devoted to applications of the mentioned results to differential equations. There will be presented sufficient conditions for local solvability of ordinary differential equations unsolved for the derivative of unknown function.

Remark. Coffee with the speaker is served after the talk (15h30 - 16h00)

¹Sergey Zhukovskiy has currently a Research Position at DEEC-FEUP, supported by a Marie Curie grant. He obtained the Master degree at University of Calgary (Canada) under the supervision of Prof. E.Y. Braverman, in 2008, and the Ph.D. degree in Moscow (Russia) under the supervision of Prof. A.V. Arutyunov, in 2011. Sergey has already a large number of published papers. He is particularly interested in nonlinear analysis, covering mappings, abnormal problems and quadratic mappings. His homepage is <http://paginas.fe.up.pt/~sergey>.