

ICTP DIPLOMA PROGRAMME IN MATHEMATICS 2018-2019

Topology

B. Zimmermann (10 lectures : 15 hrs)

General Topology:

Topologies and topological spaces; bases and subbases; Hausdorff spaces; closure and interior; limit points; subspaces; product and box topology; continuous maps; metric and metrizable spaces; first and second countable spaces; connected and path-connected spaces; compactness, limit point compactness and sequential compactness; compact metric spaces, regular and normal spaces; lemma of Urysohn and Urysohn metrization theorems.

Textbook:

J. R. Munkres, Topology (second edition). Prentice Hall 2000