

SEMINÁRIO DO GRUPO DE FÍSICA MATEMÁTICA

Dia 15 de Outubro (segunda-feira), às 15h00, sala 6.2.33

Spectral monotonicity for quantum graphs

Jonathan Rohleder

(Universidade de Estocolmo, Suécia)

Abstract: For the Laplacian on a finite metric graph we discuss the influence of certain geometric perturbations on the spectrum. These perturbations include adding new edges to the graph or gluing together two vertices. Such graph operations often lead to a monotonous behavior of the Laplacian eigenvalues, but it may depend on the choice of matching conditions at the vertices whether the eigenvalues behave increasing or decreasing. The results are joint work with Christian Seifert (Hamburg).