Upper bounds for the Steklov eigenvalues

Bruno Colbois (Neuchâtel)

In this talk, I will study the Steklov spectrum of a warped product compact Riemannian manifold $M_h = \Omega \times_h \Sigma$. I will establish upper bounds depending on L^{∞} or L^p -norm on the function h and discuss their sharpness. I will also present some open questions. This is a work in progress with J. Brisson, A. Girouard, K. Gittins.