

Title:

Pseudo-Riemannian cobordisms and spin structures

Abstract:

Cobordisms constitute an essential tool in the study of manifolds. An interesting question is whether a given topological property and a geometric structure can coexist on a cobordism. In this talk, we describe necessary and sufficient conditions for a cobordism to admit both a spin structure, and a pseudo-Riemannian metric that induces a related metric on its boundary. The talk is based on joint projects with Smirnov (Genève), and with Bais (SISSA) and May Custodio (Parma).