

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

**CALLIAS-TYPE OPERATORS IN
 C^* -ALGEBRAS AND POSITIVE SCALAR
CURVATURE ON NONCOMPACT
MANIFOLDS**

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February 8, 2017, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: A Dirac-type operator on a complete Riemannian manifold is of Callias-type if its square is a Schroedinger-type operator with a potential uniformly positive outside of a compact set. We present an index theorem for Callias-type operators twisted with Hilbert C^* -module bundles. As an application, we derive an obstruction to the existence of Riemannian metrics of positive scalar curvature on noncompact spin manifolds in terms of closed submanifolds of codimension-one.

See <http://math.bu.edu/research/geom/seminar.html> or contact Lino Amorim (lamorim@bu.edu) or Siu Cheong Lau (lau@math.bu.edu) for more information.