CCSU department of mathematical sciences VIRTUAL COLLOQUIUM

Friday, October 9 3:00 – 4:00 PM https://ccsu.webex.com/meet/gotchev

HOW SHOULD SEQUENCES OF TORI WITH ALMOST NON-NEGATIVE SCALAR CURVATURE CONVERGE?

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Abstract: The interplay between geometric conditions and topological restrictions fascinates mathematicians. One such theorem is the scalar torus rigidity theorem which states that the only Riemannian metric with non-negative scalar curvature on a torus is the flat torus. In this talk we will give an intuitive introduction to the necessary geometric ideas needed to understand this theorem and then transition into discussing the corresponding geometric stability conjecture. This will motivate the discussion of notions of convergence for sequences of Riemannian manifolds and ways to estimate these notions of convergence.

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/colloquium/