

*Department of Mathematics,
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Food for Thought Seminar

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Exotic 7-Spheres Are Hot

Abstract:

Exotic spheres, manifolds homeomorphic but *not* diffeomorphic to the standard sphere, had eluded mathematicians since the dawn of differential topology. In 1956, John Milnor found one in seven dimensions. His short paper on the result stunned the math world and won him the Field's medal. In this talk, we'll survey the ideas of smooth structures on manifolds and smooth vector bundles, and with a few smooth moves we'll construct Milnor's exotic sphere.

Note: This is meant to be a highly accessible talk; some familiarity with algebraic topology will enhance the experience, but is not strictly necessary!

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1:00 PM

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