New q-series invariants of 3-manifolds

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While the two parts of the talk are fairly independent, they both center around the same object. What this object is will be revealed in the first, more elementary part of the talk. And, if the first part aims to answer "What?" question, the main goal of the second part will be to answer "Why?" question, i.e. explain where this new objects fits in the "big picture", describe its various properties, etc. In more technical terms, one byproduct of the first part will be a very gentle introduction into a modern program called 3d-3d correspondence, whereas the second part will connect categorification of WRT invariants with Ramanujan's mock modular forms, the equivariant character of Hitchin moduli space, the affine Grassmannian, and other problems in algebraic geometry.The talk is based on several papers with D.Pei and/or P.Putrov, C.Vafa, as well as ongoing work with C.Manolescu.

Wednesday, May 9, 2018 02:00pm - 04:00pm

Big Seminar room Ground floor / Office Bldg West (I21.EG.101)

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