

Distinguished Colloquium

**Professor Victor Kac,
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**Tuesday, August 26, 2014 - 3:00 pm
Auditorium SN-2109**

*Ramanujan mock theta function and representations of
infinite-dimensional Lie superalgebras*

Abstract:

In his last letter to Hardy in 1920, Ramanujan listed 17 functions, which he called "mock theta functions" since they behave like theta functions but have no modular invariance properties of theta functions. Since then there have been substantial progress in understanding of mock theta functions. About 10 years ago, Zwegers introduced non-holomorphic corrections, which made these functions modular. In the recent work with Wakimoto, we linked mock theta functions to representation theory of affine Lie superalgebras. This in turn sheds new light on the theory of mock theta functions.