Density at integer points of an inhomogeneous quadratic form and linear form

Abstract:
In 1987, Margulis solved an old conjecture of Oppenheim which states that for a nondegenerate, indefinite and irrational quadratic form $Q$ in $n \geq 3$ variables, $Q(\mathbb{Z}^n)$ is dense in $\mathbb{R}$. Following this, Dani and Margulis proved the simultaneous density at integer points for a pair consisting of quadratic and linear form in $3$ variables when certain conditions are satisfied. We prove an analogue of this for the case of an inhomogeneous quadratic form and a linear form.

This is based on joint work with Anish Ghosh.

Host: Brandon Seward

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10:00 AM
Zoom ID 967 4109 3409 (email Nattalie Tamam or Brandon Seward for the password)