**ANUP DIXIT**, University of Toronto
*On the Generalized Brauer-Siegel Theorem*

For a number field $K/\mathbb{Q}$, the class number $h_K$ captures how far the ring of integers of $K$ is from being a PID. The study of class numbers is a theme in number theory. In order to understand how the class number varies upon varying the number field, C. L. Siegel showed that the class number times the regulator tends to infinity in any sequence of quadratic number fields. Brauer extended this result to sequence of Galois extensions over $\mathbb{Q}$. This is the Brauer-Siegel theorem. Recently, Tsfasman and Vladut conjectured a Brauer-Siegel statement for asymptotically exact sequence of number fields. In this talk, we prove the classical Brauer-Siegel and the generalized version in several unknown cases. We also provide some effective versions of Brauer-Siegel in the classical setting.