# On the Erdos-Lovasz Tihany Conjecture for Claw-Free Graphs

*Date* Tuesday, Februay 5

*Time* 3 pm

*Location* 303 Mudd

*Abstract:* In 1968, Erdos and Lovasz conjectured that for every graph $G$ and integers $s, t \geq 2$ such that $s + t + 1 = \chi(G) > \omega(G)$, there is a partition $(S, T)$ of the vertex set of $G$ such that $\chi(G|S) \geq s$ and $\chi(G|T) \geq t$. For general graphs, the only known cases of the conecture are when $s$ and $t$ are small. Recently, the conjecture has been settled for a few classes of graphs: graphs with stability number 2, line graphs and quasi-line graphs. In this talk, we consider the conjecture for claw-free graphs and present some progress on it.

This is joint work with Maria Chudnovsky and Alexandra Fradkin.