Title: Relative Manin-Mumford and Pell's Equation over polynomial rings.

Abstract: After a bit of speculation on the Thue Equation, we move to the Pell Equation; but over $\mathbf{C}[t]$ where the solvability is much less clear than over the usual $\mathbf{Z}$. For example we sketch a proof, obtained with Umberto Zannier, that there exist only finitely many complex λ such that there are X and $Y \neq 0$ in $\mathbf{C}[t]$ with $X^2 - DY^2 = 1$, where $D = t^6 + t + \lambda$. This would be false with $t^4 + t + \lambda$. We will learn about things like $t^2(t^4 + t + \lambda)$ in Daniel Bertrand's talk.