## 1161-14-208Asher Auel\* (asher.auel@dartmouth.edu), Department of Mathematics, Kemeny Hall,<br/>Hanover, NH 05055. Brill-Noether special cubic fourfolds.

The study of special cubic fourfolds leads to beautiful connections between algebraic cycles, Hodge theory, the rationality problem, K3 surfaces, hyperkaehler varieties, and derived categories. In this talk, I'll explain a connection to the theory of algebraic curves, via the notion of Brill–Noether special cubic fourfolds. Specifically, I'll discuss the open problem of establishing lower bounds on the Clifford index of Brill–Noether special cubic fourfolds. (Received August 17, 2020)