## Maximal cliques in strongly regular graphs

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In this talk, I will introduce a cubic polynomial that can be associated to a strongly regular graph  $\Gamma$ . The roots of this polynomial give rise to upper and lower bounds for the size of a maximal clique in  $\Gamma$ . I will explain how we can use this cubic polynomial to rule out the existence of strongly regular graphs that correspond to an infinite family of otherwise feasible parameters. This talk is based on joint work with Jack Koolen and Jongyook Park.