1154-94-1777 **Jessalyn Bolkema*** (jbolkema@hmc.edu), **Khodakhast Bibak**, **Robert Calderbank**, **Neville Fogarty** and **Felice Manganiello**. *Families of quantum error-correcting codes from Reed-Muller codes.* Preliminary report.

Quantum error-correcting codes play an essential role in the further development of fault-tolerant quantum computation. In this talk, we construct families of CSS codes with a particular property: for every X-stabilizer x, the Y-stabilizers supported on x contain a self-dual code. This property is both powerful and useful, with implications for the transversal realization of a certain logical gate, as shown by Rengaswamy and Calderbank. We consider algebraic and computational properties of the constructed families. (Received September 16, 2019)