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Caroline Matson* (caroline.matson@colorado.edu). *Formal Groups with Complex Multiplication.*

In their 1965 paper Lubin and Tate showed the existence of one-dimensional formal group laws with large endomorphism rings, or complex multiplication. They used these to generate abelian extensions, culminating a lovely development of local class field theory. In this talk we examine the associated theory for higher-dimensional formal group laws. In particular, we show that given a formal group law \tilde{F} over a field of characteristic p there exists a lift F to a p -adic ring and we prove that this lift has complex multiplication. (Received September 03, 2019)