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**Charlotte Chan\*** ([charchan@mit.edu](mailto:charchan@mit.edu)), Department of Mathematics, Simons Building (Building 2), Room 106, 77 Massachusetts Avenue, Cambridge, MA 02139. *Geometric L-packets of toral supercuspidal representations.*

In 2001, Yu gave an algebraic construction of supercuspidal representations of p-adic groups which is now known to be exhaustive when the residual characteristic is sufficiently large (Kim, Fintzen). There has since been a lot of progress towards explicitly constructing the local Langlands correspondence: DeBacker-Reeder and Kazhdan-Varshavsky (depth zero), Reeder and DeBacker-Spice (unramified toral), and Kaletha (regular supercuspidals). In this talk, we present recent and ongoing work with Masao Oi investigating a geometric counterpart to this story. (Received January 25, 2020)