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Sug Woo Shin* (sug.woo.shin@berkeley.edu), 901 Evans Hall, Berkeley, CA 94720. *From
Langlands-Rapoport conjecture to cohomology of Shimura varieties.*

Kisin proved the Langlands-Rapoport conjecture for Shimura varieties of abelian type (under a very mild condition). The conjecture describes the special fibers of Shimura varieties at primes of good reduction with natural group actions. So it should in principle lead to the description of the cohomology with such actions, which is one of the central problems in the Langlands program. I will explain how this is done based on work of Langlands-Rapoport, Kottwitz and Milne as well as my work in progress with Mark Kisin and Yihang Zhu. (Received August 04, 2015)