1007-11-128   **Elena Mantovan*** (`mantovan@math.berkeley.edu`), Department of Mathematics, UC, Berkeley, CA 94720-3840. *Moduli spaces of p-divisible groups.* Preliminary report.

In 1996 Rapoport and Zink constructed certain moduli spaces of p-divisible groups as local models of Shimura varieties. Conjecturally, the cohomology of these spaces provides a geometric realization of the local Langlands correspondences. In this context, an important question to address is how to distinguish the cohomology groups which contain supercuspidal representations. I'll discuss certain aspects of the geometry of these moduli spaces which are related to this question and present some partial resuts. (Received February 15, 2005)