

**MR3221302** [22E50](#) [11F33](#) [11F70](#) [11F85](#)

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★ **On the  $K(n)$ -invariants of a supersingular representation of  $GL_2(\mathbb{Q}_p)$ .** (English summary)

*The legacy of Srinivasa Ramanujan*, 55–75, *Ramanujan Math. Soc. Lect. Notes Ser.*, 20, *Ramanujan Math. Soc., Mysore*, 2013.

Summary: “S. Morra has recently computed the  $K$ -socle filtration as well as the structure of the space of  $K(n)$ -invariants of a supersingular representation  $GL_2(\mathbb{Q}_p)$  [*J. Algebra* **339** (2011), 252–303; [MR2811322](#); *Trans. Amer. Math. Soc.* **365** (2013), no. 12, 6625–6667; [MR3105765](#)]. In this paper, we give a short and elementary proof of these results in the regular case, by making use of the Iwahori-Hecke model for supersingular representations of  $GL_2(\mathbb{Q}_p)$ , introduced earlier by the authors [*J. Algebra* **423** (2015), 1–27].”

{For the collection containing this paper see [MR3222020](#)}

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