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Carl Mautner*, Mathematics Department, University of California, Riverside, 900 University Ave., Riverside, CA 92521, and **Simon Riche**. *Exotic sheaves, parity sheaves and the Mirković–Vilonen conjecture.*

Mirković and Vilonen conjectured a parity-vanishing property for stalks of perverse sheaves on the affine Grassmannian corresponding to Weyl modules under the geometric Satake equivalence. I will discuss the statement of this conjecture and its proof. Our proof involves a generalization to positive characteristic of an amazing equivalence due to Arkhipov–Bezrukavnikov–Ginzburg. The original equivalence has been useful in studying representations of quantum groups, and we suspect our generalization could play a similar role in the modular setting. (Received September 16, 2015)