

The finitary symmetric group algebra in characteristic 2

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In 1996, Baranov and Kleshchev classified maximal ideals in the finitary symmetric group algebra over fields of characteristic not 2. I will present the corresponding classification in characteristic 2, which deviates slightly from other characteristics in final statement, and much more significantly in proof. I will explain further how this results fits into a deeper, partly conjectural, connection between prime ideals in the finitary symmetric group algebra and the structure theory of symmetric tensor categories, in particular the higher Verlinde categories of Benson, Etingof and Ostrik.