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A database of p-adic tori

Maximal tori in reductive groups form the foundation for many constructions in p-adic representation theory. Many of these constructions place constraints on the tori involved, requiring that they split over unramified or tamely ramified extensions of the ground field. When the residue characteristic is small, wild tori occur even for groups of small rank. Such tori complicate standard tools used to construct representations, such as Bruhat-Tits buildings, Néron models and the Moy-Prasad filtration. In an effort to aid in the study of representations in small characteristic, I will present an online database of p-adic tori.

As the database is still at an early stage, I will be soliciting feedback on what kinds of data, presentation or search features would be most useful to researchers in the audience.