
Yang-Baxter basis of Hecke algebra and Casselman's problem (extended abstract)

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Abstract

We generalize the definition of Yang-Baxter basis of type A Hecke algebra introduced by A.Lascoux, B.Leclerc and J.Y.Thibon (Letters in Math. Phys., 40 (1997), 75–90) to all the Lie types and prove their duality. As an application we give a solution to Casselman's problem on Iwahori fixed vectors of principal series representation of p-adic groups.

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