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Jyotsna Mainkar Diwadkar* (diwadkar@pitt.edu), Department of Mathematics, 301 Thackerary, University of Pittsburgh, Pittsburgh, PA 15260. *Nilpotent Conjugacy Classes in p-adic Lie Algebras.*

We will study the following question: Are nilpotent conjugacy classes of reductive Lie algebras over p-adic fields definable? By definable, we mean definable by a formula in Pas's language. In this language, there are no field extensions and no uniformisers. Using Waldspurger's parametrisation, we answer in the affirmative in the case of special orthogonal Lie algebras $\mathfrak{so}(n)$ for 'n' odd, over p-adic fields. (Received September 28, 2005)