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**K R Goodearl\***, Department of Mathematics, University of California at Santa Barbara, Santa Barbara, CA 93106, and **S Launois**, Department of Mathematics, University of Kent at Canterbury, Canterbury, Kent CT2 7NF, England. *The Poisson Dixmier-Moeglin equivalence.*

A Poisson algebra  $A$  over a field  $k$  satisfies the *Poisson Dixmier-Moeglin equivalence* provided the Poisson primitive ideals in  $A$  coincide with the locally closed points in the Poisson prime spectrum of  $A$ , and with the Poisson rational Poisson prime ideals of  $A$ . Since quantized coordinate rings of algebraic varieties satisfy the classical Dixmier-Moeglin equivalence in all known cases, those Poisson algebras which arise as semiclassical limits of quantized coordinate rings should satisfy the Poisson version of the equivalence. In fact, no examples of affine Poisson algebras failing this equivalence are known. We will discuss methods based on torus actions by which the equivalence has been established for many semiclassical limits of quantized coordinate rings. (Received September 15, 2007)