

1067-58-1284

Luen-Chau Li* (lucienli@math.psu.edu), Department of Mathematics, Pennsylvania State University, University Park, PA 16802, and **Zhaohu Nie** (znjie@psu.edu), Department of Mathematics, Pennsylvania State University, Altoona Campus, 3000 Ivyside Park, Altoona, PA 16601. *Liouville integrability of a class of integrable spin Calogero-Moser systems and exponents of simple Lie algebras.*

In previous work, we introduced a class of integrable spin Calogero-Moser systems associated with the classical dynamical r-matrices with spectral parameter, as classified by Etingof and Varchenko for simple Lie algebras. In this talk, we will show how to establish Liouville integrability of these systems by a uniform method. In principle, the method which we develop here to construct and count the number of integrals should also work for other systems associated with simple Lie algebras and with spectral parameter dependent Lax operators. (Received September 20, 2010)