Jun Yu* (junyu@zscas.edu.cn), Shaoxing, 312000, Peoples Rep of China. Symmetries and algebras for a MKdV-type equation in (2+1)-dimension. Preliminary report.

In this paper, a (2+1)-dimensional MKdV-type equation proposed by Hietarinta is changed to a more universal form with a variable coefficient. Using the formal series symmetry method, a set of infinitely many symmetries with a arbitrary function for this system is obtained, and then the corresponding Lie algebra structure is also given. (Received September 15, 2009)