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S. Bang* (sjbang3@pusan.ac.kr), Department of Mathematics, Pusan National University, Geumjeong Gu, Busan, 609-735, South Korea, **J H Koolen** (koolen@postech.ac.kr), Department of Mathematics, POSTECH Hyoja-dong, Namgu, Pohang, 790-784, South Korea, and **V. Moulton** (vincent.moulton@cmp.uea.ac.uk), School of Computing Sciences, University of East Anglia, Norwich, NR4 7TJ, England. *The Bannai-Ito Conjecture.*

In their 1984 book “Algebraic Combinatorics I: Association Schemes”, E.Bannai and T.Ito conjectured that there are only finitely many distance-regular graphs with fixed valency $k \geq 3$. In the series of papers, they showed that their conjecture holds for $k = 3, 4$, and for the class of bipartite distance-regular graphs. J.H.Koolen and V.Moulton also show that there are only finitely many distance-regular graphs with $k = 5, 6$, or 7 , and there are only finitely many triangle-free distance-regular graphs with $k = 8, 9$ or 10 . In this talk, we show that the Bannai-Ito conjecture holds for any integer $k > 2$ (i.e., for fixed integer $k > 2$, there are only finitely many distance-regular graphs with valency k). This is a joint work with J.H.Koolen and V.Moulton. (Received March 02, 2009)