Abstract Submitted for the DFD16 Meeting of The American Physical Society

Decay of passive scalar fluctuations in axisymmetric turbulence KATSUNORI YOSHIMATSU, Nagoya Univ, PETER A. DAVIDSON, University of Cambridge, YUKIO KANEDA, Aichi Institute of Technology — Passive scalar fluctuations in axisymmetric Saffman turbulence are examined theoretically and numerically. Theoretical predictions are verified by direct numerical simulation (DNS). According to the DNS, self-similar decay of the turbulence and the persistency of the large-scale anisotropy are found for its fully developed turbulence. The DNS confirms the time-independence of the Corrsin integral.

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Date submitted: 21 Jul 2016 Electronic form version 1.4