Abstract Submitted for the DPP07 Meeting of The American Physical Society

Relativistic MHD Jets and Their Interactions with the Intracluster Medium HUI LI, MASA NAKAMURA, SHENGTAI LI, LANL, HAO XU, LANL/UCSD — We present the formulation of relativistic MHD flows, likely occurring in the environment of accretion onto supermassive black holes. Three-dimensional relativistic MHD simulations will be presented on how the energy outflow will partition among different physical components and on the collimation and stability of such systems. The interaction between such flows with their environment, e.g., the intra-cluster medium, will be discussed.

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Date submitted: 19 Jul 2007 Electronic form version 1.4