Chongying Dong* (dong@math.ucsc.edu), Department of Mathematics, University of California, Santa Cruz, CA 95064, and Cuipo Jiang, Department of Mathematics, Shanghai Jiaotong University, Shanghai, Peoples Rep of China. Rationality of vertex operator algebras. Preliminary report.

We will present a result on the rationality of a vertex operator algebra. That is, a vertex operator algebra $V$ is rational if and only if its Zhu algebra $A(V)$ is semisimple under some mild assumptions. (Received March 02, 2006)