## Abstract Submitted for the MAR05 Meeting of The American Physical Society

Bilayer sliding mechanism for the zincblende to rocksalt transition in SiC H.T. STOKES, D.M. HATCH, Brigham Young University, J.J. DONG, Auburn University, J. GUNTER, H. WANG, J.P. LEWIS, Brigham Young University — We have theoretically investigated the mechanism of the pressure-induced reconstructive zincblende-to-rocksalt phase transition in SiC. Starting with an extensive survey of 925 possible transition pathways, we found that those with the lowest enthalpy barriers all have a common mechanism: bilayer sliding of (111) planes.

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Date submitted: 22 Dec 2004 Electronic form version 1.4