1003-49-116 **Marian Bocea*** (`bocea@math.utah.edu`), Department of Mathematics, University of Utah, 155 South 1400 East, Rm. 233, Salt Lake City, UT 84112. *The characterization of Young measures arising in the asymptotic analysis of thin solid films.*

Special classes of Young measures are introduced in connection with the asymptotic analysis of thin films via a 3D-2D dimensional reduction. A complete description of the class of *bending Young measures* is provided, in the spirit of Kinderlehrer and Pedregal's characterization of gradient Young measures. Joint work with Irene Fonseca. (Received August 09, 2004)