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**David C Wilson\*** ([dcw@math.ufl.edu](mailto:dcw@math.ufl.edu)), Mathematics Department, 464 Little Hall–PO Box 118105, University of Florida, Gainesville, FL 32611. *Mathematical issues, problems, and challenges in echocardiographic image analysis.*

This talk will address some of the issues, problems, and challenges confronting the investigator, who attempts to develop computer-based algorithms for making automated measurements on echocardiographic images. The challenges include speckle (i.e noise), signal dropout, structures of unusual shape, complex motion patterns, patient variability, and pathology. Possible methods of attack are suggested for overcoming some of these problems. (Received September 29, 2000)