

1116-VM-2236 **Bradley Michael Stiefel*** (bstiefel@asu.edu), 630 E Jensen St., Unit 158, Mesa, AZ 85203,
and **Zach Kenyon, Tin Pham, Eric Kostelich** and **Yang Kuang**. *Ensemble Kalman Filter for
Prediction of Treatment Response in Metastatic Prostate Cancer*. Preliminary report.

Prostate-specific androgen (PSA) measurements are commonly used to predict tumor progression in prostate cancer patients. An Ensemble Kalman Filter was applied to an ordinary differential equation model of androgen deprivation therapy for metastatic prostate cancer. The sensitivity of the models to errors in parameters and measurements will be characterized, and the accuracy of the models' predictions compared to observations will be assessed. (Received September 22, 2015)