



**Climate Program Remote Sensing Workshop  
February 12-14, 2018**

**SPEAKER TITLES/ABSTRACTS**

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“Optimization Methods in Remote Sensing”

Statistical estimation and inference for large data sets require computationally efficient optimization methods. Remote sensing retrievals are, in fact, estimates of the underlying true state, and their optimization routines must necessarily make compromises in order to keep up with large data volumes. A sub-group of the Remote Sensing Working Group of the SAMSI Program on Mathematical and Statistical Methods for Climate and the Earth System is investigating how optimization in Bayesian-inspired retrievals and on-line statistical methods could be made more computationally efficient. We will report on discussions held to-date and describe how progress in the theory of data systems research can positively impact optimization methodologies.