

## **Extending SDDP-style algorithms for multi-stage stochastic programming**

David Morton, Northwestern University

We consider two classes of multi-stage stochastic linear programs (MSLPs) that lend themselves to solution by stochastic dual dynamic programming (SDDP). First, we consider a distributionally robust MSLP. Here, the specific realizations in each stage are fixed, and distributional robustness is with respect to the probability mass function governing those realizations. Second, we consider a class of partially observable MSLPs. In both cases, we describe a computationally tractable variant of SDDP to approximately solve the model. This is joint work with Oscar Dowson, Daniel Duque, and Bernardo Pagnoncelli.