

**FURTHER DEVELOPMENT OF ORTHOGONAL SPACE RANDOM WALK BASED METHODS.** Wei Yang, Department of Chemistry and Biochemistry, Florida State University, Institute of Molecular Biophysics, Tallahassee, FL 32306

In this talk, a few novel developments of orthogonal space random walk (OSRW) based methods are presented. Specifically, the original metadynamics strategy is replaced by a novel “dynamic reference restraining” recursion method; a generalized dynamic filter is added to more specifically guide the sampling; and a novel design of the essential energy space is employed. As presented, the above developments enable more powerful capability of OSRW in sampling long timescale biomolecular events.