

1106-VL-2147 **Joseph Richard Sadow*** (jrsadow@asu.edu), P.O. Box 871804, Tempe, AZ 85287. A
split-explicit time-filtered Leapfrog Scheme with Application to Atmospheric Modeling.

I will describe a novel split-explicit scheme for leapfrog numerical methods. It is based on a 4th order implicit time filter and uses two different time steps: the fast modes are handled implicitly, and the slow modes are calculated using a time-filtered leapfrog method that is implemented as a predictor-corrector scheme. I will give some examples of the ability of the new method to speed up computations, stabilize unphysical modes and will discuss its potential applicability to numerical forecast models. (Received September 15, 2014)