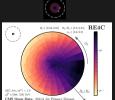
New Angles on Energy Correlators

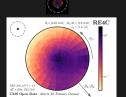
Samuel Alipour-fard, Jesse Thaler, Ankita Budhraja, Wouter Waalejwin github.com/samcaf/ResolvedEnergyCorrelators CMS Open Data CMS Open Data **Efficient** $R_1 \in [0.27, 0.3]$ **RE3C** RESC 0 Computation N-particle correlations $\mathcal{O}(M^2 \ln M)_{\text{scaling}}^{\text{new}}$ CMS Open Data : 2011A Jet Primary Dataset CMS Open Data : 2011A Jet Primary Dataset W-jet Simulation Traditional correlators **New correlators**

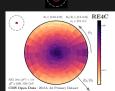
Separate scales, sift soft QCD **Energy**

Correlators ℓ_{OGP} m_t ,

CMS Open Data: 2011A Jet Primary Dataset. 105 events **Enables** - N=2 (17.8 s) --- Old (2.5 s) N=5 (17.7 s) −−− Old (1³/₂ h) previously N=50 (17.8 s) unimaginable N=100 (17.8 s) computations!







New Energy Correlators

Improved scaling. Visually intuitive