Optimized Wombling for LHC data  ALEX ROMAN, KONSTANTIN MATCHEV, PRASANTH SHYAMSUNDAR, University of Florida — The relevant information from collision events from the Large Hadron Collider (LHC) and other colliders can be represented as spatial point data in a suitable phase space. The observation of sharp discontinuities in the observed event number density would hint at the presence of new physics beyond the Standard Model. We apply and further improve upon some known wombling techniques from other fields. We illustrate our method with simulated high energy data.