Charge order instabilities in the t-J model ANDREA ALLAIS, JOHANNES BAUER, SUBIR SACHDEV, Harvard Univ — Motivated by the observation of incommensurate charge order in the pseudogap phase of the cuprates, most notably in a series of recent experiments on YBCO, we explore the occurrence of charge-ordering instabilities in an extended t-J model. We allow for on site and bond ordering, with arbitrary ordering wavevector and a number of possible internal wavefunctions. Our results are obtained by a combination of slave boson mean field theory, dynamical mean field theory and variational Monte Carlo. We find instability towards several possible ordering patterns, depending on the choice of parameters.