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**Geons and Spin-2 Condensates in the AdS Soliton** GAVIN HARTNETT, GARY HOROWITZ, UC Santa Barbara — We construct geons starting with gravitational perturbations of the AdS soliton. Previous studies of a charged scalar field in the soliton background showed a holographic insulator/superconductor transition at a critical chemical potential. We explore the possibility that dimensional reduction of the geon could model a transition to a d-wave superconductor. We find that although one does get a charged spin-2 condensate, it has higher free energy than the state without the condensate, so there is no phase transition.

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