

December 29, 2007

CCAPP Program Coordinator
Dept. of Physics
The Ohio State University
191 W. Woodruff Ave.
Columbus, OH 43210-1117

To whom it may concern:

Please accept the attached application for the postdoctoral fellowship position at The Ohio State University's Center for Cosmology and AstroParticle Physics (CCAPP). For my thesis, entitled '*Virialization, Entropy, and Feedback in Clusters of Galaxies*', I studied the connection of feedback mechanisms – such as AGN, star formation, and radiative cooling in cluster cores – to gas entropy, and the role of this feedback in altering global ICM properties and the impact on galaxy formation. I have also been studying a method for quantifying the virialization state of clusters through the band dependence of X-ray temperatures. For my thesis, I assembled a sample of 350 archival *Chandra* observations for 276 clusters totaling 11.6 Msec. The results of this laborious task have been many and are briefly detailed in the research proposal.

Along with this letter are my curriculum vitae, a list of publications, and my proposed fellowship research program. Letters of recommendation from Megan Donahue, Mark Voit, and Jack Baldwin will arrive under separate cover. Please do not hesitate to contact me if there is any further information I can provide as you review my application.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ken Cavagnolo', written over a light gray rectangular background.

Kenneth W. Cavagnolo
Michigan State University