

November 29, 2009

Professor A.C. Fabian  
Institute of Astronomy  
Madingley Road  
Cambridge, Cambridgeshire CB3 0HA  
United Kingdom

Dear Prof. Fabian:

Please accept the attached application for your postdoctoral position to work within the Institute of Astronomy X-ray Group advertised through the AAS Job Register. A major part of my past and on-going research has focused on better understanding feedback from active galactic nuclei (AGN). As such, I have studied, and am deeply interested in, the accretion modes which fuel supermassive black holes to become AGN, the mechanisms which result in relativistic AGN jets, how AGN transport radiative and mechanical energy to an ambient medium, and how that energy alters the environment.

I feel the IoA is an excellent fit for me, and the IoA research environment will benefit from my addition. My expertise in radio and X-ray astronomy – in addition to experience with infrared, optical, and UV analysis – ideally suits me to further study accreting SMBHs using the existing and next generation of facilities/instruments (*i.e.* NuStar, Simbol-X, SOFIA, ALMA, LOFAR). I am also eager to expand my research into theoretical modeling, specifically to consolidate our understanding of radio galaxies and their environments into a unified model which describes isolated FR-Is through FR-IIs in dense clusters.

Along with this letter are my CV, a list of publications, and a summary of my research interests. Letters of recommendation from Megan Donahue, Brian McNamara, and Mark Voit should 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 blue rectangular background.

Dr. Kenneth W. Cavagnolo  
University of Waterloo