

Minutes of the Meeting held at the Cuype Lecture on  
14/10/1981 at 8 PM

Present were 23 members and 3 Visitors.

Apologies for absence were received from Bondietti  
Mike Kramer, Simpson, Barnes, Miss G Becker,  
Mrs Hurly and Mrs M Spencer Jones.

The Speaker was Tony Fairall and his subject:  
"Galaxies for physicists"

The question arises: Are galaxies like  
icebergs i.e. with the greater part invisible  
Galaxies have the following components:  
Nucleus, Spheroidal component, Spiral  
structure, Halo, Corona all arranged  
± concentrically. We infer the presence  
of invisible matter by how the detectable  
part behaves. The spiral arms of a  
galaxy have an unusually constant  
pitch angle of  $73^\circ$ . We cannot see  
galactic nuclei but can detect radio,  
U.V. and infrared emanations. The question  
arises: Is a galactic nucleus usually  
a black hole. <sup>Galaxies with</sup> Very energetic galactic  
nuclei are called quasars or Seyfert  
galaxies. Material is sometimes ejected  
from the galactic nuclei as in  
M 87 and 3C 273