The PSF for clusters at high redshift with XMM-Newton

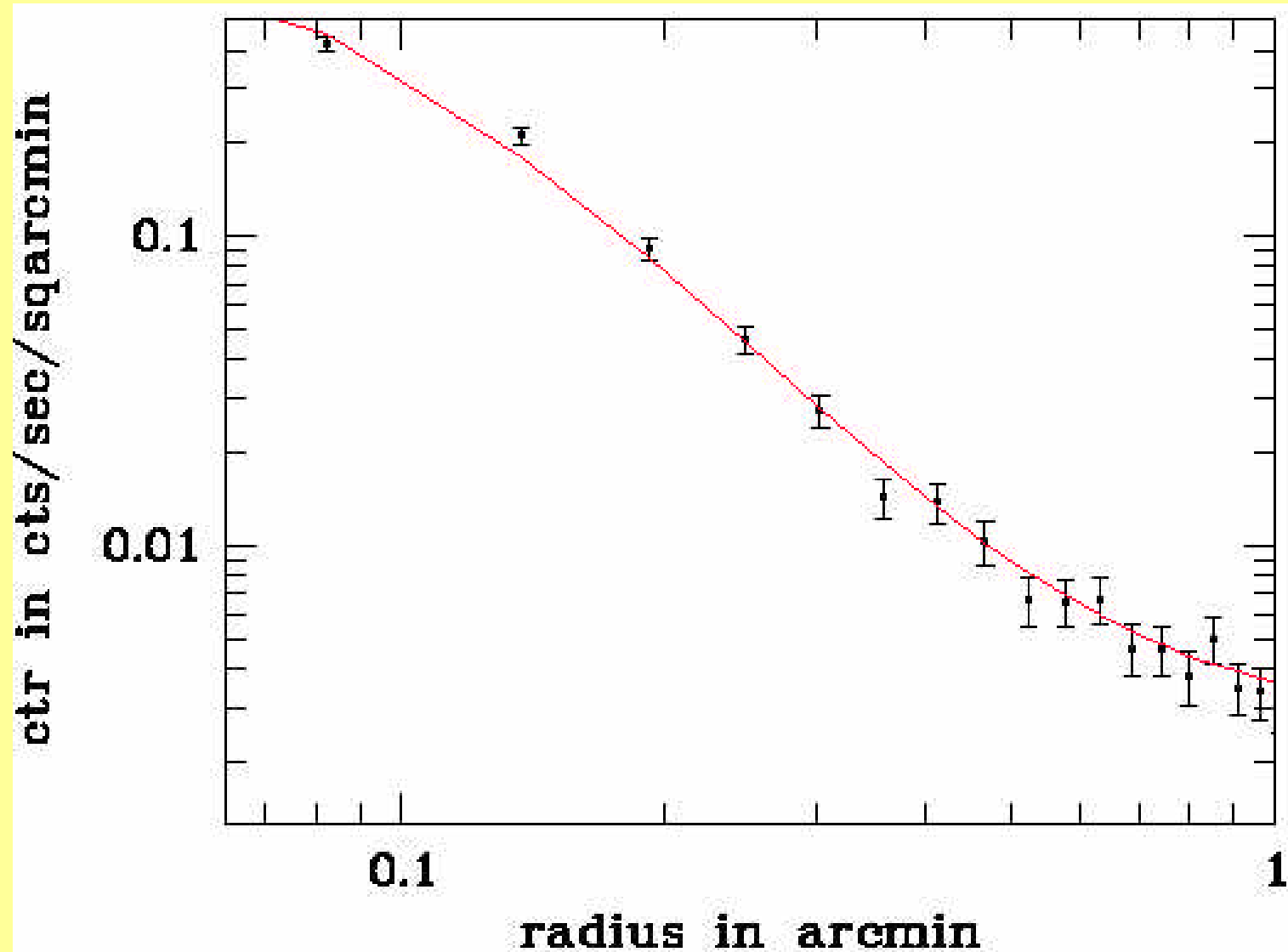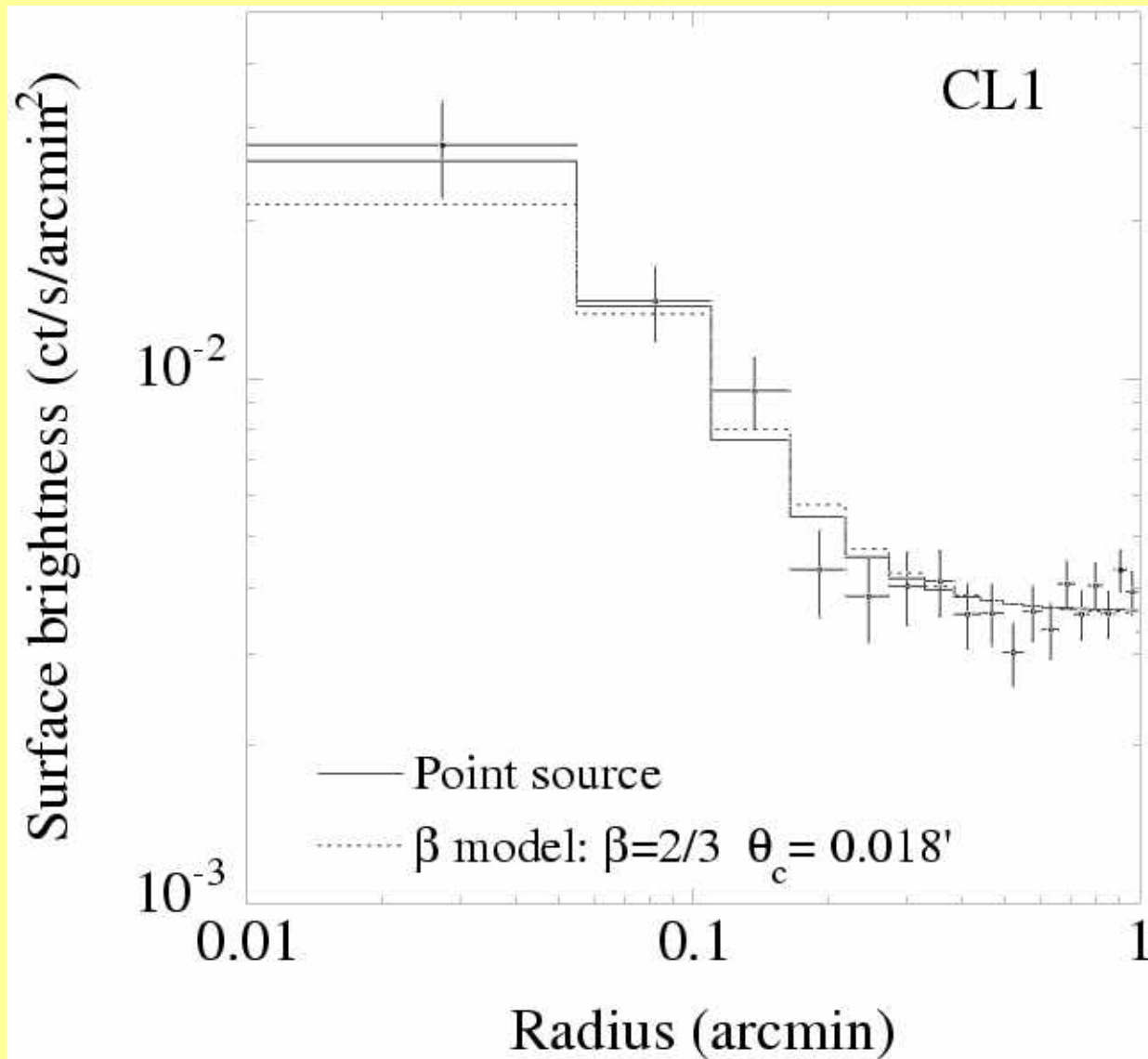Doris Neumann, CEA/Saclay
in collaboration with M. Arnaud

why is it so important to know the PSF so accurately for distant clusters of galaxies?

Gives strong constraints on emission mechanism : extended plasma or AGN
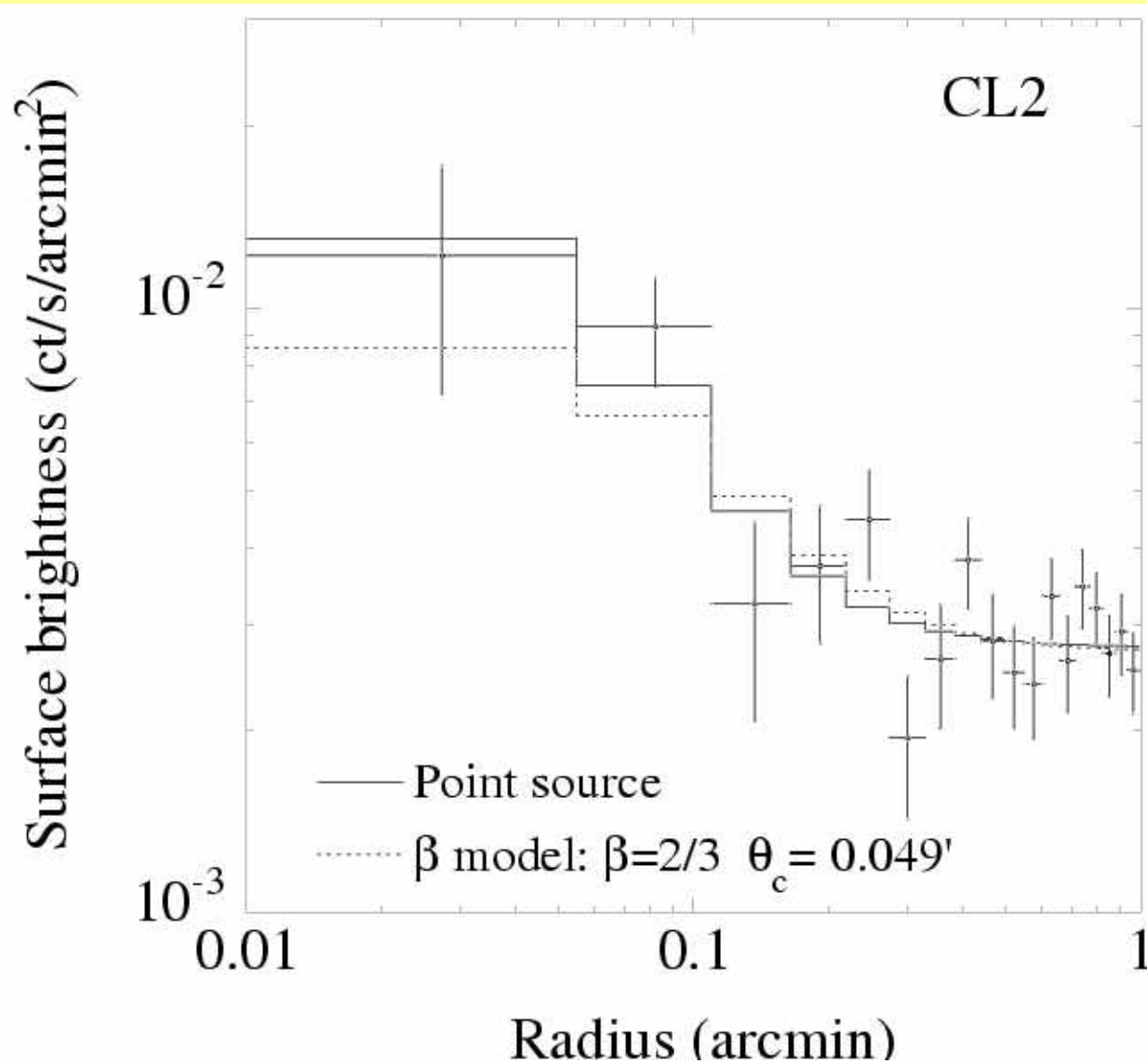
The example of an AGN at z=2

A cluster candidate at z=1.7

Another cluster candidate at z=1.3

Conclusion

The PSF of XMM seems to be well constrained and can be used to measure source extends of distant clusters

This is important for the search of distant clusters in serendipitous XMM-Newton surveys