



Contribution ID : 25

Type : **not specified**

## Observation and simulation of phase-effects in phantom images obtained with x-ray tubes

*Friday, 6 May 2011 11:00 (0:45)*

### Abstract content

We have performed systematic studies of the edge enhancement observed in digital images of cylindrical plastic phantom objects obtained with x-ray tubes. Geometrical conditions are those encountered in commercial mammography units (focal spot size= 100 micrometers, total source-to-detector distance 66 cm) and in a laboratory setup (microfocus X-ray tubes, distances up to 1 m). We observe edge enhancements of the order of 1% with respect to the background signal. We interpret the observations with a diffraction-based simulation.

### Summary

**Primary author(s) :** Dr. MARÍA ESTER, Brandan (Instituto de Física UNAM)

**Presenter(s) :** Dr. MARÍA ESTER, Brandan (Instituto de Física UNAM)