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## A 32x32 Doped Silicon based matrix read by HEMT/SiGe Cryo-electronics

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During the last decade, CEA have started a long term program to achieve the collective realization of a large (32x32 pixels)  $\mu$ Calorimeters camera for X-ray Astrophysics. This camera is based on silicon doped sensors with Composite Tantalum absorber readout thanks to HEMT/SiGe based Cryo-Electronics. The goal of this development is to achieve a spectral resolution of about  $2\text{eV}@6\text{keV}$  with a thermal budget in the order of  $1\ \mu\text{W}@50\text{mK}$  for over 4000 pixels.

After some delays in the production, we present our first measurements obtained our first 32x32 sensors matrix.

We measured  $R(T)$ , noise and spread between pixels. We will present our first Cryo-Electronics MUX based results.

### Less than 5 years of experience since completion of Ph.D

N

### Student (Ph.D., M.Sc. or B.Sc.)

N

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