

# Fabrication of Sparse Readout Detectors for X-ray Astronomy

Completed Technology Project (2018 - 2021)



## Project Introduction

We propose to continue our detector development program in X-ray astronomy. Under our current APRA grant we have fabricated a new read out integrated circuit that is one half of a hybrid CMOS detector. Here we propose to build and test these innovative detectors, which could potentially be flown on future X-ray missions with focused optics and/or large effective area. This proposal supports NASA's goals of technical advancement of technologies suitable for future missions and training of graduate students.

## Primary U.S. Work Locations and Key Partners

Organizations Performing Work	Role	Type	Location
Penn State	Supporting Organization	Academia	University Park, Pennsylvania



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## Organizational Responsibility

**Responsible Mission Directorate:**

Science Mission Directorate (SMD)

**Responsible Program:**

Astrophysics Research and Analysis

## Project Management

**Program Director:**

Michael Garcia

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## Project Management (cont.)

**Program Manager:**

Dominic J Benford

**Principal Investigator:**

David Burrows

**Co-Investigators:**

Melissa T Gensimore

Abe Falcone

## Technology Areas

**Primary:**

- TX08 Sensors and Instruments
  - └ TX08.1 Remote Sensing Instruments/Sensors
    - └ TX08.1.1 Detectors and Focal Planes

## Target Destination

Outside the Solar System