Dr. Nina Bonaventura

DAWN/NBI Postdoc

- Current science primarily involves the **optical & infrared,** spectroscopic and photometric study of **high-z galaxies** and **Brightest Cluster Galaxies**.

I also design **algorithms** and develop associated **astronomical software** (in Python) for optimizing and analyzing observations taken with space-based observatories (previously for Chandra, currently for the JWST/NIRSpec GTO and Commissioning teams).

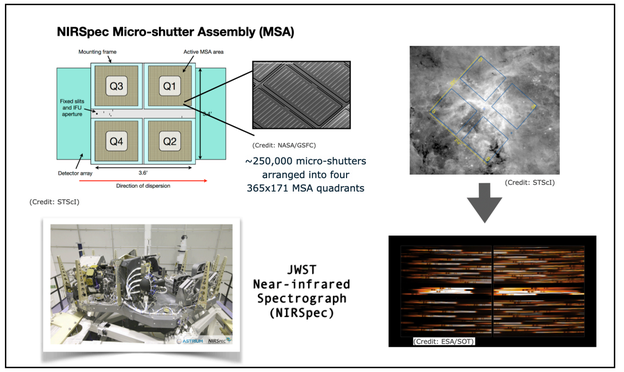
- During the last year, I have been an active NIRSpec GTO Team member, continuing to help expand, maintain, and test the "IPA+eMPT" software developed with superviser Dr. Peter Jakobsen for optimizing NIRSpec Multi-object Spectroscopy (MOS) mode observations.

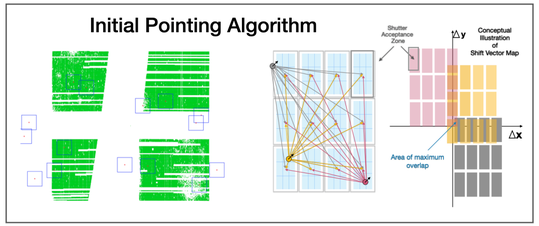
- I have also conducted an ongoing search for and characterization of **z>9 Lyman-break galaxy** candidates culled from Dr. Gabe Brammer's Complete **Hubble** Archive for Galaxy Evolution (CHArGE).

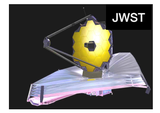
- In the future, I will participate in the JWST/NIRSpec commissioning activities at STScI, as both a trainer and trainee; and continue to carry out the associated scientific and technicals tasks required by the scientific program of the NIRSpec GTO Team.

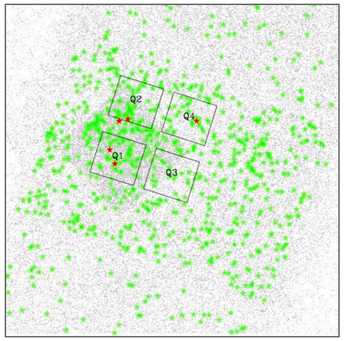
- I also hope to expand the current investigation of Lyman-break-selected z>9 galaxy candidates from CHArGE to lower redshifts, to start a comprehensive scientific campaign of galaxy properties at z >~7

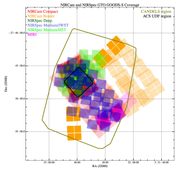
Multi-object Spectroscopy with JWST/NIRSpec







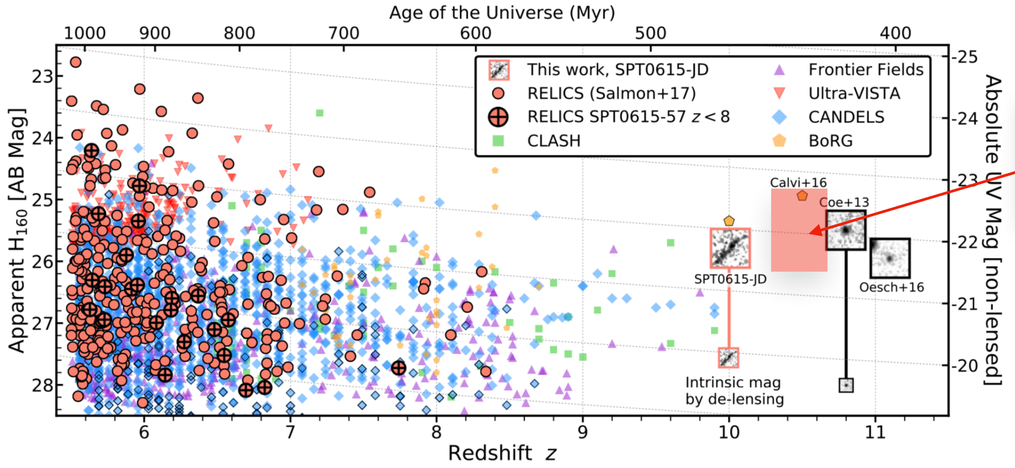




JADES NIRSpec DEEP/HST Program

Deep PRISM, G140M, G235M, G395M, and G395H MSA spectroscopy of known candidate high-z galaxies in UDF/GOODS-S uncovered with HST

Lyman Break Selection of High-redshift Galaxies



New (?) z~10.4-10.6 galaxy candidates from CHArGE