

## PUBLIKACE

Ing., Yesid Mora Sierra, M.Sc.

2019:

- Y. Mora, *et al.*, “Advanced FPGA-Based Readout Electronics for Strip Detectors”, under review in IWORID 2019.
- J. Broulim, Y. Mora, *et al.*, “j-Pix - A Multiplatform Acquisition Package for Timepix3”, accepted in JINST, 2019.
- M. Holik, Y. Mora, *et al.*, “Alpha calibration of the Timepix pixel detector exploiting energy information gained from a common electrode signal”, under review in JINST, 2019.

2018:

- P. Smolyanskiy, Y. Mora, *et al.*, “Properties of GaAs:Cr-based Timepix detectors”, in JINST, 2018.
- M. Holik, Y. Mora, *et al.*, “A synchronization and data acquisition system for silicon detectors”, in JINST, 2018.
- A. Sopczak, Y. Mora, *et al.*, “Determination of Luminosity with Thermal Neutron Counting Using TPX Detectors in the ATLAS Cavern in LHC Proton-Proton Collisions at 13 TeV”, in IEEE Transactions on Nuclear Science, Volume 65, Issue 7, July 2018, Pages 1378-1383.
- A. Sopczak, Y. Mora, *et al.*, “Precision Measurements of Induced Radioactivity and Absolute Luminosity Determination with TPX Detectors in LHC Proton-Proton Collisions at 13 TeV”, in IEEE Transactions on Nuclear Science, Volume 65, Issue 7, July 2018, Pages 1371-1377.
- B. Zat'ko, Y. Mora, *et al.*, “First tests of Timepix detectors based on semi-insulating GaAs matrix of different pixel size”, in JINST, Volume 13, Issue 2, 9 February 2018, Article number C02013.
- B. Zat'ko, Y. Mora, *et al.*, “Imaging performance of a Timepix detector based on semi-insulating GaAs”, in JINST, Volume 13, Issue 1, January 2018, Article number C01034.

2017:

- I. Tomandl, Y. Mora, *et al.*, “High resolution imaging of 2D distribution of lithium in thin samples measured with multipixel detectors in sandwich geometry”, in Review of Scientific Instruments 88, 023706 (2017).
- M. Holik, Y. Mora, *et al.*, “Enhanced Timepix3 chipboard for operation in vacuum and back-side-pulse spectroscopy”, in 25th Telecommunications Forum, TELFOR 2017.

- **Oral presentation:** “Readout Interface for Strip Detectors with Spectrometric Applications”, in Brookhaven National Laboratory, Instrumentation Division, October, 2017.
- A. Sopczak, Y. Mora, *et al.*, “Precision luminosity of LHC proton-proton collisions at 13 TeV using hit counting with TPX pixel devices”, in IEEE Transactions on Nuclear Science, Volume 64, Issue 3, March 2017, Article number 7842554, Pages 915-924.

2016:

- Y. Mora, V. Georgiev, “Readout Interface for Strip Detectors with Spectrometry Applications,” in IEEE 21th International Conference on Applied Electronics, 2016.
- Sopczak, A., Y. Mora, *et al.*, “Precision luminosity of LHC proton-proton collisions at 13 TeV using hit-counting with TPX pixel devices”, in 2016 IEEE Nuclear Science Symposium, Medical Imaging Conference and Room-Temperature Semiconductor Detector Workshop, NSS/MIC/RTSD 2016, Volume 2017-January, 16 October 2017, Article number 8069683; 2016 IEEE Nuclear Science Symposium, Medical Imaging Conference and Room-Temperature Semiconductor Detector Workshop, NSS/MIC/RTSD 2016; Strasbourg; France; 29 October 2016 through 6 November 2016; Category number CFP16NSS-ART; Code 131365.
- **Oral presentation:** B. Bergmann, Y. Mora, *et al.*, “The ATLAS-TPX detector network”, in IEEE Transaction on Nuclear Science, Strasbourg, 2016.

2015:

- **Poster:** J. Vacik, Y. Mora, *et al.*, “Study of Nuclear Track-Based Biosensors by 3D Neutron Micro-Radiography and Ion Energy Loss Spectroscopy,” in IEEE Nuclear Science Symposium & Medical Imaging Conference, and Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors workshop, San Diego, CA, 2015.

2013:

- **Oral presentation:** J. Vacik, Y. Mora, *et al.*, “Neutron Depth Profiling with Multipixel Detectors”, in IEEE Nuclear Science Symposium & Medical Imaging Conference, and Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors workshop, Seoul, Korea, 2013, N38.