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ACADEMIC APPOINTMENTS

- Research Engineer, Kavli Institute for Particle Astrophysics and Cosmology

Publications

PUBLICATIONS

- **Demonstrating repetitive non-destructive readout with SiSeRO devices** *JOURNAL OF ASTRONOMICAL TELESCOPES INSTRUMENTS AND SYSTEMS*

  Chattopadhyay, T., Herrmann, S., Orel, P., Donlon, K., Prigozhin, G., Morris, G., Cooper, M., LaMarr, B., Malonis, A., Allen, S. W., Bautz, M. W., Leitz, C.

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- **X-ray speed reading with the MCRC: prototype success and next generation upgrades**

  Orel, P., Pan, A. Y., Herrmann, S. C., Chattopadhyay, T., Morris, G. R., Stueber, H., Allen, S. W., Wilkins, D. R., Prigozhin, G. Y., LaMarr, B. J., Foster, R. F., Malonis, A. C., Bautz, et al

  edited by Holland, A. D., Minoglou, K.

  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Continued developments in X-ray speed reading: fast, low noise readout for next-generation wide-field imagers**

  Herrmann, S. C., Orel, P., Chattopadhyay, T., Morris, G. R., Prigozhin, G. Y., Stueber, H. R., Allen, S. W., Bautz, M. W., Donlon, K., LaMarr, B. J., Leitz, C. W., Miller, E. D., Pan, et al

  edited by Holland, A. D., Minoglou, K.

  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Demonstrating sub-electron noise performance in Single electron Sensitive Readout (SiSeRO) devices**

  Chattopadhyay, T., Herrmann, S., Orel, P., Donlon, K., Allen, S. W., Bautz, M. W., Cantrall, B., Cooper, M., LaMarr, B., Leitz, C., Miller, E., Morris, R., Pan, et al

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- **The XOC X-ray Beamline: Probing Colder, Quieter, and Softer**

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  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Towards efficient machine-learning-based reduction of the cosmic-ray induced background in X-ray imaging detectors: increasing context awareness**

  Poliszczuk, A., Wilkins, D., Allen, S. W., Miller, E. D., Chattopadhyay, T., Schneider, B., Darve, J., Bautz, M., Falcone, A., Foster, R., Grant, C. E., Herrmann, S., Kraft, et al

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  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Fast, low-noise image sensor technology for strategic X-ray astrophysics missions**
  Bautz, M. W., Miller, E. D., Prigozhin, G. Y., LaMarr, B. J., Malonis, A., Foster, R., Grant, C. E., Schneider, B., Leitz, C., Donlon, K., Prigozhin, I., Lambert, R., Cooper, et al
  edited by DenHerder, J. W., Nikzad, S., Nakazawa, K.
  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Improved noise performance from the next-generation buried-channel p-MOSFET SiSeROs** *JOURNAL OF ASTRONOMICAL TELESCOPES INSTRUMENTS AND SYSTEMS*
  Chattopadhyay, T., Herrmann, S., Kaplan, M., Orel, P., Donlon, K., Prigozhin, G., Morris, G., Cooper, M., Malonis, A., Allen, S. W., Bautz, M. W., Leitz, C.
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- **X-ray speed reading with the MCRC: a low noise CCD readout ASIC enabling readout speeds of 5 Mpixel/s/channel**
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- **Single electron Sensitive Readout (SiSeRO) X-ray detectors: Technological progress and characterization**
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- **First results on SiSeRO devices: a new x-ray detector for scientific instrumentation** *Journal of Astronomical Telescopes, Instruments, and Systems*
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