

Laboratorio di misure d'angolo e rotondità – Pubblicazioni

Laboratories for angles and roundness measurements - Publications

[Improved performance of a refurbished photoelectric autocollimator](#)

M. Astrua, M. Pisani 2021 *Meas. Sci. Technol.* 32 015010

[Sensor for the Characterization of 2D Angular Actuators with Picoradian Resolution and Nanoradian Accuracy with Microradian Range](#)

M. Pisani, M. Astrua, S.B.T. Raj, *Sensors* 2020, 20 (24), art. no. 7034, pp. 1-9

[Characterization of Angle Accuracy and Precision of 3-Degree-of-Freedom Absolute Encoder Based on NanoGPS OxyO Technology](#)

M. Pisani, M. Astrua, P.-A. Carles, S. Kubsky, T.-L. Nguyen, O. Acher, *Sensors* 2020, 20 (12), art. no. 3462, pp. 1-9

[G-LAS: a ring laser gyroscope for high accuracy angle measurements](#)

M. Pisani, M. Astrua, M. Santiano, N. Beverini, A. Di Virgilio, E. Maccioni, U. Giacomelli, J. Belfi, 2018 *J. Phys.: Conf. Ser.* 1065 (3), art. no. 032009.

[G-LAS a ring laser goniometer for angular metrology](#)

J. Belfi, N. Beverini, G. Carelli, A. Di Virgilio, U. Giacomelli, E. Maccioni, M. Astrua, M. Pisani, M. Santiano 2017 *Joint Conference of the European Frequency and Time Forum and IEEE International Frequency Control Symposium, EFTF/IFC*, 2017, art. no. 8088926, pp. 462-465.

[The new INRIM rotating encoder angle comparator \(REAC\)](#)

M. Pisani and M. Astrua, 2017 *Meas. Sci. Technol.* **28** 045008

[Supplementary comparison EURAMET. L-S23 \(# 1269\) high precision roundness measurement by error separation techniques](#)

E Prieto, R Muñoz, AA Arce, R Bergmans, G Kotte, M. Holmberg, M. Svendsmark, J. Toftegaard, M. astrua, M. Pisani, F. Saraiva, L. Eusebio, H. Noura, J. Salgado, 2017 *Metrologia* **54** 04003

[Characterization of ISA – BepiColombo internal calibration source](#)

M. Pisani, M. Astrua, V. Iafolla, F. Santoli, D. Lucchesi, C. Lefevre, M. Lucente, 2016 *IEEE Metrology for Aerospace (MetroAeroSpace)*, 2016, pp. 495-499

[Planar angle metrology: G-LAS, the INRIM – INFN ring laser goniometer](#)

J. Belfi, N. Beverini, A. Di Virgilio, E. Maccioni, M. Astrua, M. Pisani, M. Santiano, 2016 *European Frequency and Time Forum (EFTF)*, 2016, pp. 1-4

[On-ground actuator calibration for ISA—BepiColombo](#)

M Pisani, M Astrua, V Iafolla, F Santoli, D Lucchesi, C. Lefevre, M. Lucente, 2015 *IEEE Metrology for Aerospace (MetroAeroSpace)*, pp. 312-317

[The INRIM-INFN ring laser gyroscope for planar angle metrology application](#)

M Astrua, J Belfi, N Beverini, A Di Virgilio, G Carelli, E. Maccioni, A. Ortolan, M. Pisani, M. Santiano, 2015 *Fotonica AEIT Italian Conference on Photonics Technologies*, pp. 1-4

[Towards the realization of the new INRIM angle comparator](#)

M Pisani, M Astrua - Proc. 13th Euspen Int. Conf.(Berlin), 2013

[The new INRiM nanoangle generator](#)

M Astrua and M Pisani, 2009 *Metrologia* **46** 674

[Prism refractive index measurement at INRiM](#)

M Astrua, M Pisani, 2009 *Meas. Sci. Technol.* 20 095305

[Angle amplification for nanoradian measurements](#)

M. Pisani and M. Astrua, 2006 *Appl. Optics* 45 (8), 1725-1729