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Technical Publications and Documents

Publications

- GLAO in the visible, the SAM experience, by A. Tokovinin. In: Adaptive Optics for ELT3, Florence, May 2013 (sciencesconf.org:ao4elt3:12940) [[PDF, 240K](#) ^[1]]
- Performance of the SOAR adaptive module with UV Rayleigh guide star, by A.Tokovinin, R.Tighe, P.Schurter, R.Cantarutti, N.van der Blik, M.Martinez, E.Mondaca, S.Heathcote. 2012, Proc. SPIE, 8447, paper 166 [[PDF, 904K](#) ^[2]]
- SAM sees the light, by A.Tokovinin, R.Tighe, P.Schurter, R.Cantarutti, N.van der Blik, M.Martinez, E.Mondaca, A.Montane, W. Naudy Cortes. 2010, Proc. SPIE, 7736, paper 7736-132 [[PDF, 874K](#) ^[3]]
- SAM - a facility GLAO instrument, by A.Tokovinin, R.Tighe, P.Schurter, R.Cantarutti, N.van der Blik, M.Martinez, E.Mondaca, A.Montane. Proc. SPIE, 2008, V. 7015, paper #157 [[PDF, 2M](#) ^[4]]
- Performance and error budget of a GLAO system, by A.Tokovinin. Proc. SPIE, 2008, V. 7015, paper #77 [[PDF, 216KB](#) ^[5]]
- SPIE Paper: A. Tokovinin, S. Thomas, B. Gregory, N.van der Blik, P. Schurter, R. Cantarutti, "Design of ground-layer turbulence compensation with a Raleigh beacon". Proc. SPIE, 2004, 5490, 870-878 [[540K](#), [PDF](#) ^[6]]
- SPIE Paper: A. Tokovinin, S. Thomas, G. Vdovin, "Using 50-mm electrostatic membrane deformable mirror in astronomical adaptive optics" Proc. SPIE, 2004, 5490, 580-585 [[328K](#), [PDF](#) ^[7]]
- SPIE Paper: S. Thomas, "A Simple Turbulence Simulator for Adaptive Optics" Proc. SPIE, 2004, 5490, 766-773 [[675.4KB](#), [PDF](#) ^[8]]
- SPIE Paper: S. Thomas, "Optimized Centroid Computing in a Shack-Hartmann Sensor" Proc. SPIE, 2004, 5490, 1238-1246 [[325.8KB](#), [PDF](#) ^[9]]
- S. Thomas, "SAM - the SOAR Adaptive Module". Paper at "DEUXIEMES JOURNEES D'IMAGERIE A TRES HAUTE DYNAMIQUE ET DETECTION D'EXOPLANETES" (Nice, 6-10th October, 2003 - to be published by EAS) [[340K](#), [PDF](#) ^[10]]
- The [PAPER](#) ^[11] and the [presentation \(.ppt\)](#) ^[12] at the SPIE Waikoloa Conference in August 2002 (SPIE Proc., 2003, V. 439, pp. 673-680).

Documents

- SOAR Telescope Control System [[PDF](#) ^[13]]. November 9, 2005
- Update of LGS design (R.Tighe) [[PPT, 353Kb](#) ^[14]]. May 22, 2007
- Location of SAM laser at SOAR (R.Tighe) [[PPT, 488Kb](#) ^[15]]. December 20, 2006
- SOAR Computer System Diagrams [[PDF](#) ^[16]]. November 9, 2005
- Interface of the SOAR M3 with a Tip-Tilt Error Sensor [[PDF](#) ^[17]]. November 9, 2005
- SOAR TCS Commands [[PDF](#) ^[18]]. November 9, 2005
- Tertiary Mirror Assembly Electrical Interface [[PDF](#) ^[19]]. November 9, 2005
- The SOAR Communication Library New (SCLN) [[PDF](#) ^[20]]. November 9, 2005
- Report on the closed loop tests [[HTML](#) ^[21]]. March 2, 2005
- Presentation for the Observatories Council meeting given on June 3, 2004 [[1048K, PPT](#) ^[22]]
- Report on Delta-CoDR (May 19, 2004) ([PDF](#) ^[23])
- Adaptive Optics [Tutorial](#) ^[24] at CTIO [[html](#)].
- ACTR meeting, CTIO, May 26, 2003 [[html](#)] ^[25]
- Concepts of Adaptive Optics for SOAR. [[Document: 342K, PS](#)] ^[26]
- Presentation of SOAR AO (July 12, 2001) [[Slides: 360K, PS](#)] ^[27]
- [Simulation results](#) ^[28] (text files)
- Results of system simulation with F.Rigaut's code (Dec 10, 2001) [[95K, PS](#)] ^[29]
- SOAR SAC, Oct-10-2001: [html presentaion of AO project](#) ^[30]
- Project description (rev.1.7, Sept. 2001) [[84K, gzipped PS](#)] ^[31]
- The html document (Sept. 2001): [Concepts of Adaptive Optics for SOAR.](#) ^[32]
- Seeing at Cerro Pachon [[52K, PS](#)] ^[33]

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