





THE FRENCH AEROSPACE LAB



15th Coherent Laser Radar Conference

List of presentations Click on title to download (beware: several presentations are unavailable)

| Session | Main Author | Title |
|---------|-------------|---|
| Keynote | Flamant P. | Lidar evolution over the last 30 years: witness and actor, a confrontation of worldwide and local points of view. |
| Keynote | Vaughan M. | Reflections on interferometry |
| 1 | Canat G. | High peak power Erbium-Ytterbium MOPFA for coherent Lidar anemometry |
| 1 | Khan M. J. | Ultra-sensitive, room-temperature THz detector using nonlinear parametric upconversion |
| 1 | Latrasse C. | Low noise semiconductor lasers for remote sensing applications |
| 1 | Mizutani K. | Conductive-cooled 2micron laser development for CO2 and wind measurements |
| 2 | Brewer A. | Preliminary Shipborne Doppler Lidar Results from the VAMOS Ocean-Cloud-Atmosphere- Land Study Regional Experiment (VOCALS-REx) |
| 2 | Hannon S. | Wind Resource Assessment Using Long Range Pulsed Doppler Lidar |
| 2 | Koch G. J. | Wind Measurement Intercomparisons using New Compact, Pulsed, 2-Micron, Coherent- Detection Doppler Lidar Transceiver |
| 3 | Durand Y. | A-SCOPE: objectives and concepts for an ESA mission to measure CO2 from space with a lidar |
| 3 | Flamant P. | The A-SCOPE Project and After |
| 3 | Ishii S. | Development of Coherent 2- μ m Differential Absorption and Wind lidar |
| 3 | Singh U. | High Repetition Rate Pulsed 2-Micron Laser Transmitter for Coherent CO2 DIAL Measurement |
| 4 | Iwai H. | Comparison of dual-Doppler lidar measurements of wind with helicopter measurements. |
| 4 | Kavaya M. | Development of a Compact, Pulsed, 2-Micron, Coherent-Detection, Doppler Wind Lidar Transceiver |
| 4 | Lolli S. | Long Range Wind Lidar for Atmospheric Dynamics Studies |
| 4 | Rahm S. | Airborne Doppler Lidar Wind Measurements from Polar to Tropical Regions |













THE FRENCH AEROSPACE LAB

| 5 | Banakh V. | Visualization of 2-D transverse velocity fields in the atmosphere |
|----|----------------|--|
| 5 | Belmonte A. | Performance of coherent lidar receivers using atmospheric compensation techniques |
| 5 | Boquet M. | Analysis and optimization of Pulsed Doppler Lidar Wind Profile measurement process in complex terrain |
| 5 | Gatt P. | Matched Filter CNR, Diversity and Signal Detectivity for Deterministic and Random Coherent Ladar Signals |
| 6 | Durand Y. | Lidar technology pre-development in support of A-SCOPE, the ESA mission to measure CO2 from space |
| 6 | Gibert F. | Turbulent CO2 flux measurements by lidar: length scales, results and comparison with in- situ sensors |
| 6 | Joly L. | Laser diode absorption spectroscopy for accurate CO2 line parameters at 2 μm . Consequences for space-based DIAL measurements |
| 6 | Sakaizawa D. | Complementary measurement with multi-positioned in-situ sensors and the 1.57 μm laser absorption spectrometer |
| 7 | Brousmiche S. | Parameters Estimation of Wake Vortices in Ground Effect |
| 7 | Frehlich R. | Data Requirements for Doppler Lidar Measurements of Winds from Space |
| 7 | Kavaya M. | Computer Simulation of Global Profiles of Carbon Dioxide Using a Pulsed, 2-Micron, Coherent-Detection, Column-Content DIAL System |
| 8 | Besson C. | Pulsed 1.5 µm LIDAR for axial aircraft wake vortex detection |
| 8 | Fujiwara C. | Features of dust devils in the urban area detected by a 3-D scanning Doppler lidar |
| 8 | Hill C. | Airport trials with the Aviation ZephIR coherent lidar |
| 8 | Schmitt N. P. | A340 flight test results of a direct detection onboard UV LIDAR in forward-looking turbulence measurement configuration |
| 8 | Valla M. | 1.5µm lidar for helicopter blade tip vortex detection |
| 9 | Dierking M. P. | Genetically Optimized Periodic, Pseudo-Noise Waveforms for Multi-Function Coherent Ladar |
| 9 | Jameson D. | Vibrometry with atmospheric compensation |
| 9 | Totems J. | Signal Processing Methods and Poly-Pulse Waveforms for Laser Vibrometry in Pulsed Mode |
| 10 | Kendrick R. L. | Anisoplanatic wavefront error estimation using coherent imaging |
| 10 | Marker D. | Volume control manifold for membrane adaptive optics |
| 10 | Wenski T. E. | Multiple screen image correction for digital holography |
| 11 | Anasimov I. | High Resolution Sparse Aperture Imaging Testbed |
| 11 | Karr T. J. | Power, Aperture and Wavelength Scaling of Synthetic Aperture Laser Radar |
| 11 | McManamon P. | Conformal EO Sub- Aperture Array Based Laser Radar with non mechanical beam steering |













THE FRENCH AEROSPACE LAB

| 11 | Stokes A. J. | Increasing image contrast using Golay-like sparse aperture arrays |
|--------|----------------|--|
| 12 | Chimenti R. V. | A review of sparse frequency linearly frequency modulated (SF-LFM) laser radar signal modeling with preliminary experimental results |
| 12 | Jolivet V. | Coherent combining on a remote surface of fiber amplifier arrays after propagation through turbulent atmosphere |
| 12 | Pedersen A. T. | Investigation of noise in Lightwave Synthesized Frequency Sweeper seeded LIDAR anemometers from leakage through the AO Modulators |
| 13 | Frehlich R. | Coherent Doppler Lidar for Wind Energy Research |
| 13 | Lindedlöw P. | From Prototype to Standardization – Five Years of LIDAR Anemometry in the Wind Energy Industry |
| 13 | Parmentier R. | WindCubeTM pulsed Lidar compact wind profiler: Overview on more than two years of comparison campaigns |
| 13 | Pichiguna Y. | Lidar study of the nocturnal boundary layer at the heights of modern wind-turbines |
| 14 | Jolivet V. | Coherent laser radar vibrometry for modal analysis in earthquake engineering |
| 14 | Lutzmann P. | Off Line-of-Sight Measurements of Target Vibrational Features Using Laser Vibrometry |
| 15 | Abdelazim S. | All-fiber Coherent Doppler LIDAR for Wind Sensing |
| 15 | Newbury N. | Precision ranging LIDAR using femtosecond fiber lasers |
| 15 | Pillet G. | Wideband Dual-Frequency Lidar-Radar: Waveform Generation and Field Experiment |
| 15 | Stafford J. W. | Holographic aperture ladar laboratory demonstration |
| Poster | Jacob D. | Coherent detection post detection SNR for receivers employing incoherent and coherent integration |
| Poster | Michaille L. | System design and preliminary characterisation of a fibre-based pulsed MOPA system operating at a wavelength of 2.05 mm |
| Poster | Prasad N. S. | All-solid-state UV transmitter development for ozone sensing applications |
| Poster | Valla M. | Image quality study in spectral domain for Synthetic Aperture Ladar |
| Poster | Welliver M. C. | On the Use of Optical Amplifiers in Coherent Receivers |





