



ALPAO extends its range of deformable mirrors and adaptive optics systems

Grenoble (France) – November 8, 2017 – The French company ALPAO marks a milestone to complete range of adaptive optics products. The company reviewed its deformable mirrors, wavefront sensors and adaptive optics systems to fit all applications from cost effective to state-of-the-art products.

The 2 past years marked a milestone in ALPAO's development. The French company signed major contracts with renowned partners, including Physical Sciences Inc., Harvard Medical School, Howard Hughes Medical Institute, ESO and Chara Array observatory, among others. It has pushed the company to re-design always more innovative products and to hire new collaborators with diverse skills. Bringing new ideas, they improve and revise all the ranges of adaptive optics (AO) products.

AO covers a very wide range of applications: vision science, microscopy, astronomy, defense, free space optics, physics, laser, space applications and microelectronics. ALPAO is now able to cover the needs for every applications with system and sub-systems but also all the best components: DM, WFS and real time computers.

ALPAO launches:

- **5 new deformable mirrors (DM)** over a total of 11 DM. They feature large stroke, high dynamic motion and an excellent optical quality. These ALPAO DMs are providing state-of-the-art performances which will meet and exceed the requirements for fast and accurate wavefront corrections. The new DM remain on the same technology. They will provide a much larger range of size and number of actuators.
- **3 brand new deformable mirrors (DMX)**. They features large pitch so very large pupil diameter while conserving the standard technology features. The large pupil area is able to handle much power and thus fitting very well for high power laser applications among others.
- **7 new Shack-Hartmann wavefront sensors (SH-WFS)** over a total of 11 SH-WFS. They are specifically designed for AO. They feature excellent performances to fit with every system. Sensitivity, speed and spectral range can be chosen depending on the application.
- **ALPAO Core Engine (ACE)** to control adaptive optics systems and **ACE fast**, a real time computer easily customized to fit according to applications. The software features a brand new user friendly graphical user interface.
- **ALPAO AO kits** composed of an ALPAO DM, SH-WFS and ACE software or *ACE fast*. With all the new components, ALPAO kits now offer over 100 configurations to fit with every applications.

"All our products are tailor-made to respond to users' needs and applications. This new generation of AO products will bring a new step to adaptive optics field. We are proud to be part of that technological breakthrough" said Vincent HARDY, General Manager at ALPAO.



DM 97-15



SH-WFS



ACE fast

Have a look at our website to see all news and customize your own system [here!](#)
Or get in touch with our team for any request: we will answer with pleasure.

www.alpao.com

contact@alpao.com

About ALPAO

ALPAO designs and manufactures a complete range of adaptive optics products for use in research and industry from 2005. ALPAO provides deformable mirrors, wavefront sensors and software. With a background in astronomy, ALPAO's products are tailor-made for various applications, such as astronomy, ophthalmology, microscopy, wireless optical communications and laser applications.

Thanks to breakthrough technologies, ALPAO has introduced several products over the years, such as a low-speed deformable mirror (DM) in 2006, its own wavefront sensor for closed loop operations in 2007, a hi-speed DM in 2008, new drive electronics in 2009, the DM97-08 dedicated to vision science application in 2013 and the DM468 and 820 in 2015. This year, the French company signed two major contracts with the European Southern Observatory (ESO) to develop new deformable mirrors for next generation instruments. These two projects will both be at the state-of-the-art level for astronomical applications.

With more than 10 years of experience in adaptive optics, ALPAO's deformable mirrors allow large stroke, fast deformation, high resolution images and very good optical quality.

ALPAO is an international company with customers on four continents in over 20 countries. More than 90 percent of its turnover comes from exports.

For more information: www.alpao.com

Contact: Charlotte Reverand | Communications Officer | +33 476 414 833 | charlotte.reverand@alpao.fr