

## Samenvatting Adaptieve optiek

### Publicaties:

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, J.P. Kappelhof, B. Snijders, M. Steinbuch, “*Large adaptive deformable membrane mirror with high actuator density*”, in Proceedings of SPIE Conference 5490 Astronomical Telescopes and Instrumentation – Advancements in Adaptive Optics, Glasgow, 2004.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, N. Doelman, “*Large adaptive deformable mirror; design and first prototypes*”, in Proceedings of SPIE Conference 6018 Optics & Photonics; Advanced Wavefront Control: Methods, Devices, and Applications III; San Diego, 2005.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, N. Doelman, “*Large adaptive deformable membrane mirror with high actuator density: design and first prototypes*”, in 5th International Workshop on Adaptive Optics for Industry and Medicine; Beijing, 2005.

R. Ellenbroek, M. Verhaegen and N. Doelman, “*Scalable control for optical wave-front correctors*”, abstract and presentation at the 24<sup>th</sup> Benelux meeting on Systems and Control, Houffalize, 2005.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, R.M.L. Ellenbroek, M. Verhaegen, N. Doelman, “*Actuator tests for a large deformable membrane mirror*”, in Proceedings of SPIE Conference 6272 Astronomical Telescopes and Instrumentation – Advances in Adaptive Optics II; Orlando, 2006.

R.M.L. Ellenbroek, M. Verhaegen, N. Doelman, R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, “*Distributed control in adaptive optics: deformable mirror and turbulence modeling*”, in SPIE Conference 6272 Advances in Adaptive Optics II; Orlando, 2006.

R. Ellenbroek, M. Verhaegen and N. Doelman, “*Distributed numerical linear algebra in control for adaptive optics*”, International Workshop on Numerical Linear Algebra in Signals and Systems, Monopoli, 2006.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, R.M.L. Ellenbroek, M. Verhaegen, N. Doelman, “*Deformable membrane mirror with high actuator density and distributed control*”, in 6th International Workshop on Adaptive Optics for Industry and Medicine; Galway, 2007.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, N. Doelman, R.M.L. Ellenbroek, M. Verhaegen, “*Actuator grid design for an adaptive deformable mirror*”, in Proceedings of the 7th Euspen International Conference; Bremen, 2007.

R. Ellenbroek, M. Verhaegen and N. Doelman, “*Distributed wavefront reconstruction for Adaptive Optics*”, abstract and presentation at the 26<sup>th</sup> Benelux meeting on Systems and Control, Lommel, 2007.

Roger Hamelinck, “*Adaptieve deformeerbare spiegel met hoge actuatordichtheid en gedistribueerde regeltechniek*”, presentatie op Hightech Mechatronica 2007.

R.F.M.M. Hamelinck, R.M.L. Ellenbroek, P.C.J.N. Rosielle, M. Steinbuch, M. Verhaegen, N. Doelman, “*Validation of a new adaptive deformable mirror concept*”, in Proceedings of SPIE Conference 7015 Astronomical Telescopes and Instrumentation, Marseille, 2008.

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, M. Steinbuch, R.M.L. Ellenbroek, M. Verhaegen, N. Doelman, “*Test results of an adaptive deformable mirror for future large telescopes*”, in Proceedings of the Euspen International Conference; Zurich, 2008.

Rogier Ellenbroek, Roger Hamelinck, “*Adaptieve deformeerbare spiegel voor telescopen*”, in Precisietechnologie Jaarboek 2009.

Octrooi:

R.F.M.M. Hamelinck, P.C.J.N. Rosielle, *Actuator*, Patent: 1029504 (2005)

Contactpersoon:

Niek Doelman  
[niek.doelman@tno.nl](mailto:niek.doelman@tno.nl)  
015 - 269 24 10