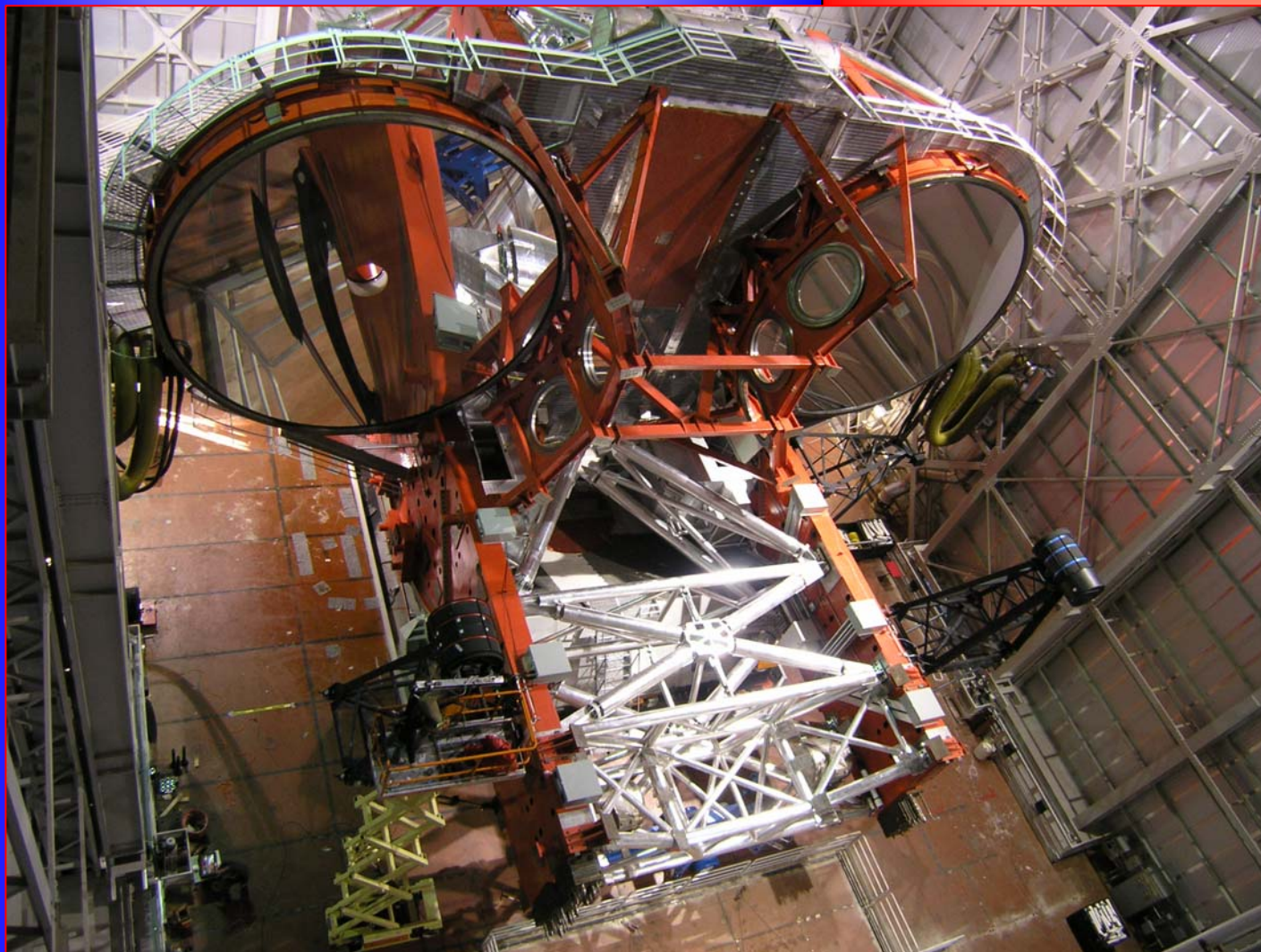
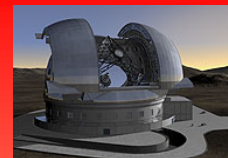


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A WorkShop in Munich, May 29<sup>th</sup> 2009



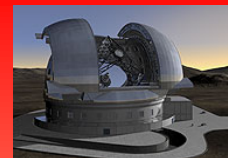
## LBT-WFI imager

by Roberto Ragazzoni  
Emanuele Giallongo  
Fabio Pasian  
Andrea Baruffolo  
Ray Bertram  
Emiliano Diolaiti  
Andrea di Paola  
Jacopo Farinato  
John Hill  
Matteo Lombini  
Fernando Pedichini  
Roberto Speziali  
Riccardo Smareglia  
Elise Vernet



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- In 1996..1997 a call for Second Generation Instruments for LBT
- Wide Field option in LBT was envisaged through a trapped Cassegrain Camera
- An heretic proposal by Padova and Rome of a Prime Focus camera
- Remember that from a Florentinian perspective Rome is deep South and Padova is part of the Austro-Hungaric empire
- The project run the risk to be marked as unfeasible, undesirable...
- In spite of this it passed as PI-instrument after a couple of year and a proposal with a  $D=1\text{m}$  lense and two aspheric surfaces...



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- Initially the spatial resolution is kept verrrry moderate (about 1arcsec) and is provisionally named “Blured”, but several dislikes this diminutive approach...
- About 92 definitive optical designs leading to a  $D=0.82\text{m}$  big lens, one concave conical aspheric...
- Green light for Call for Tender for optics in about 2000...



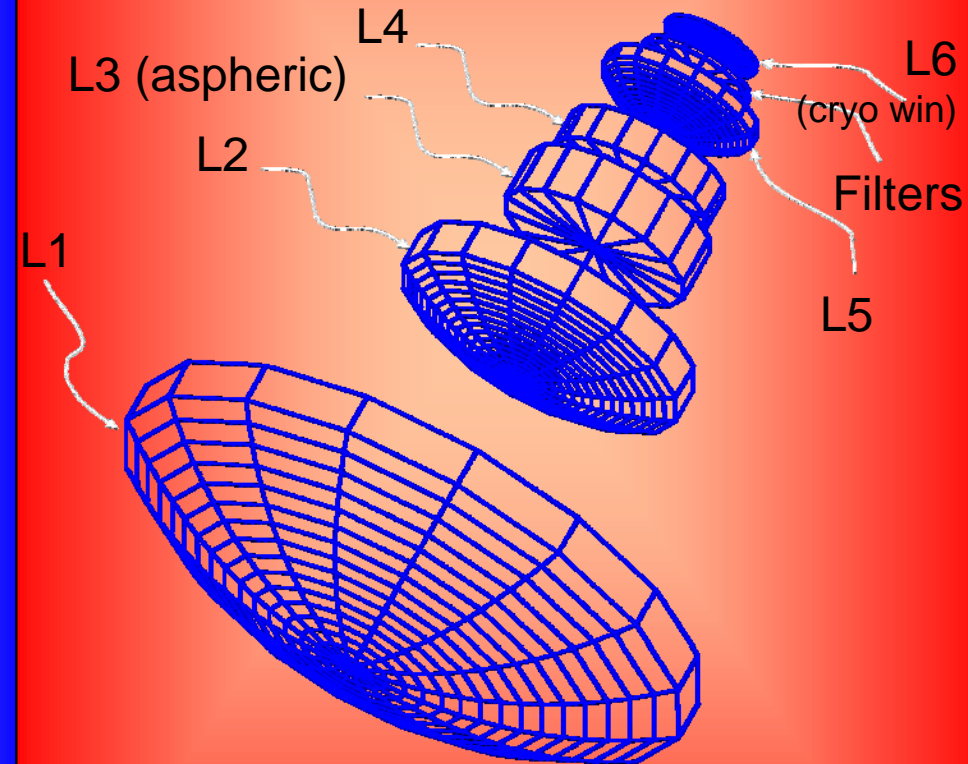
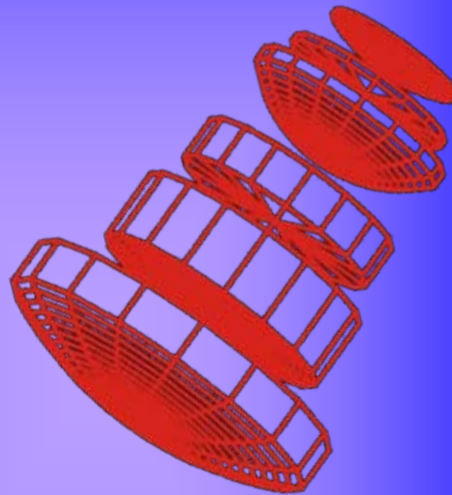
Nominal optical quality 0.2" (tre is about 0.25")



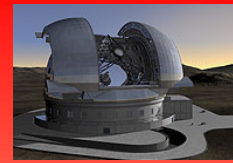
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Fused Silica (tough...)

BK7 (easy...)



Two very similar optical design,  
optimized for UB (+V) and VRIZ...



## Imaging at the E-ELT

09



Slumping of the Fused Silica blank...



Welding of the hub rough structure





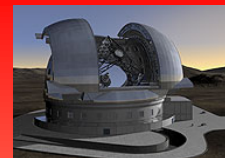
# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009





# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009

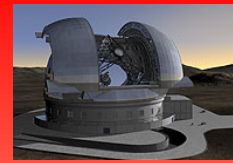




# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009

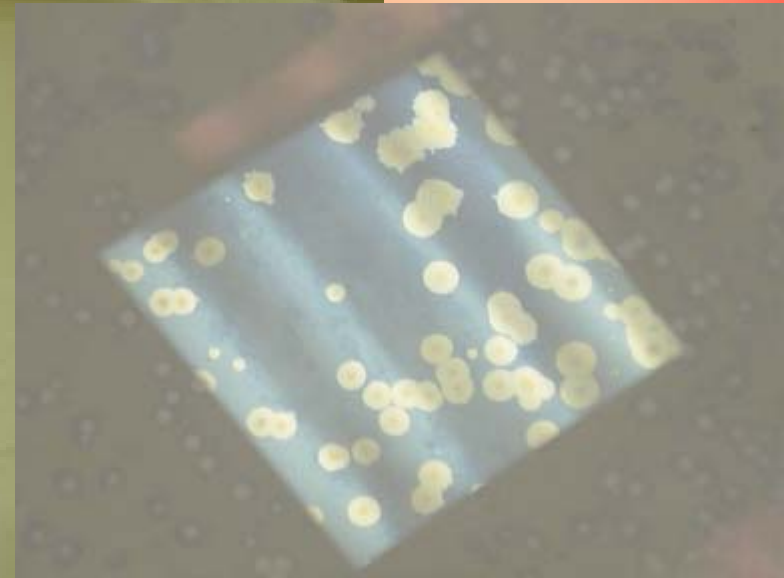
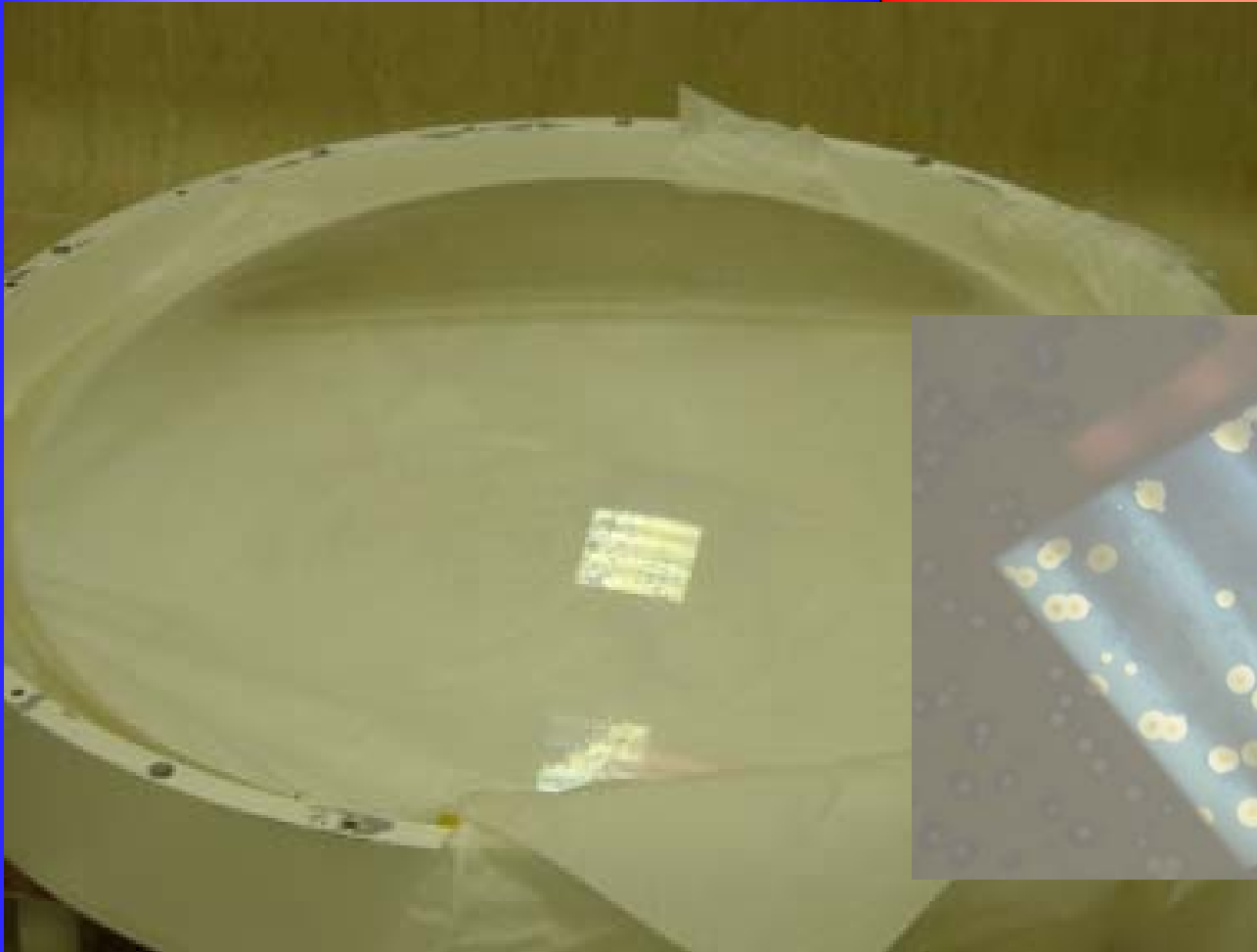


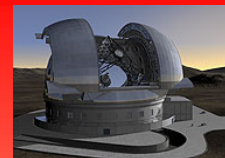




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***...and, the day the Italian State TV comes to make a footage of the big lens...***



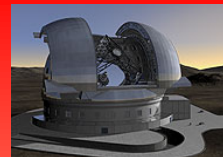


## Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009

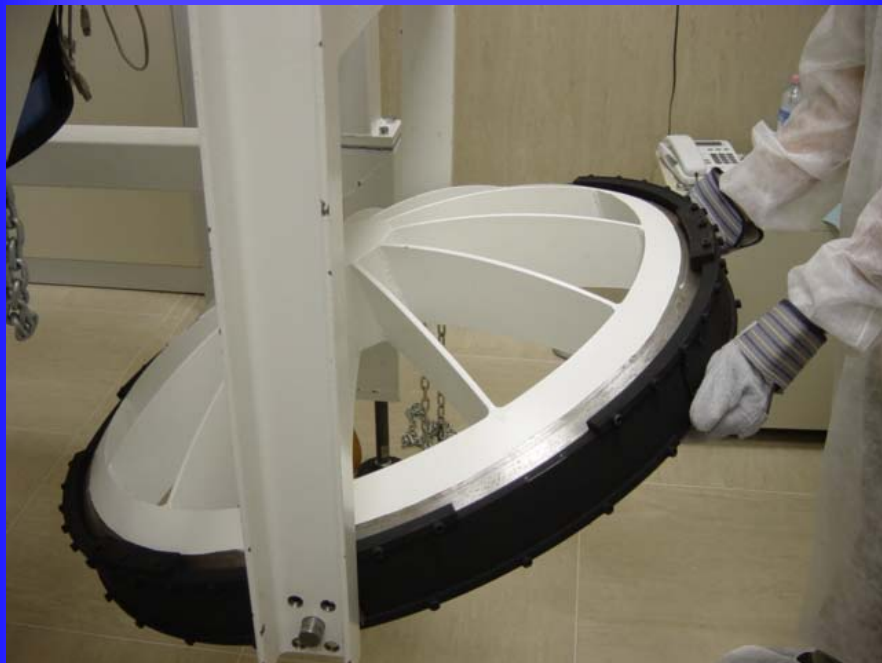


Daniel Moricaud & all the Reosc  
Sagem staff have been great in  
this affair...!!!!

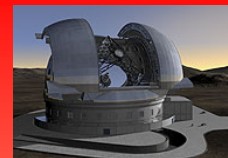




## Imaging at the E-ELT







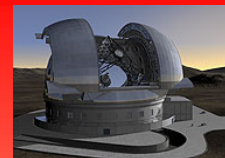
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*Postcards sent around...*

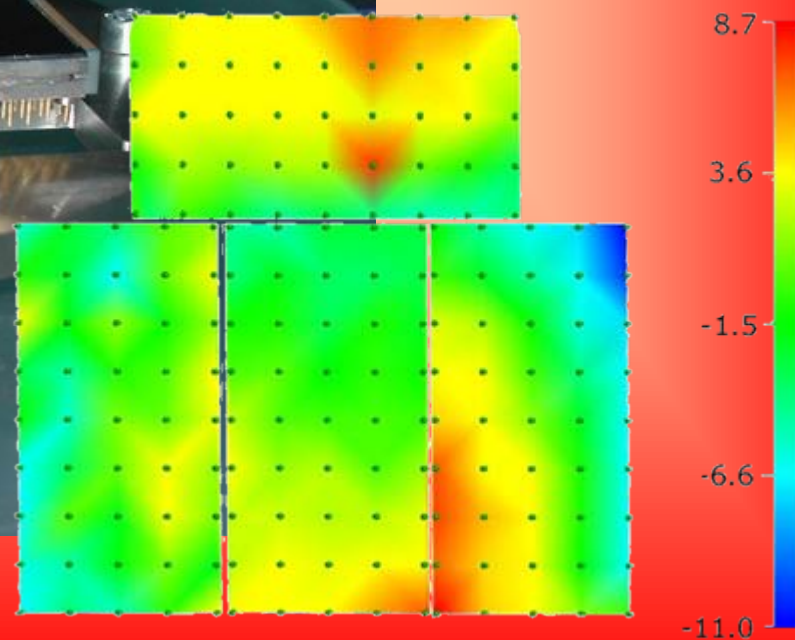
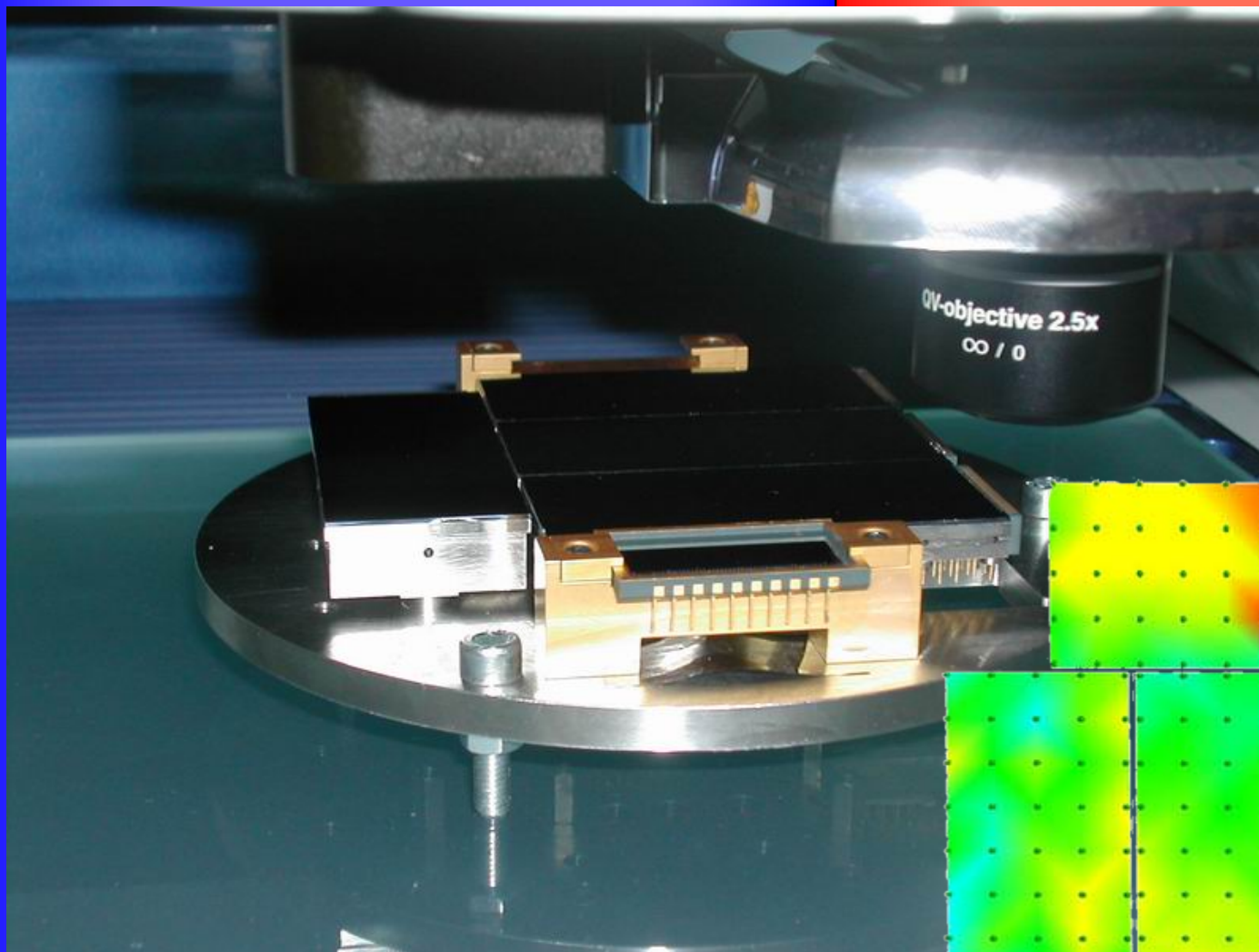


*Happy New Year from the LBC optomechanics team*





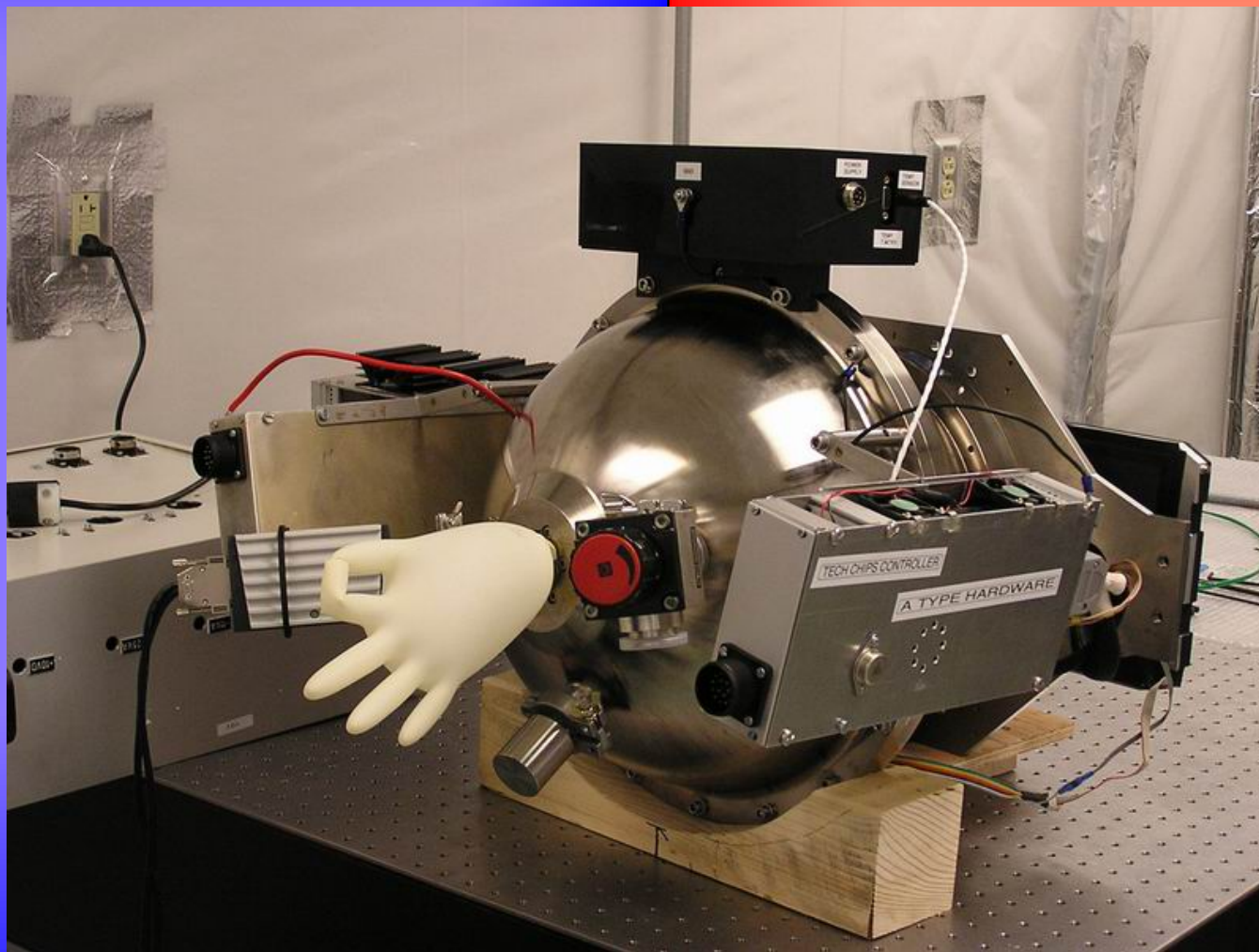
# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009



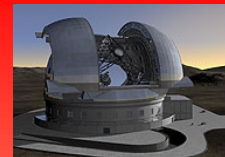


# Imaging at the E-ELT

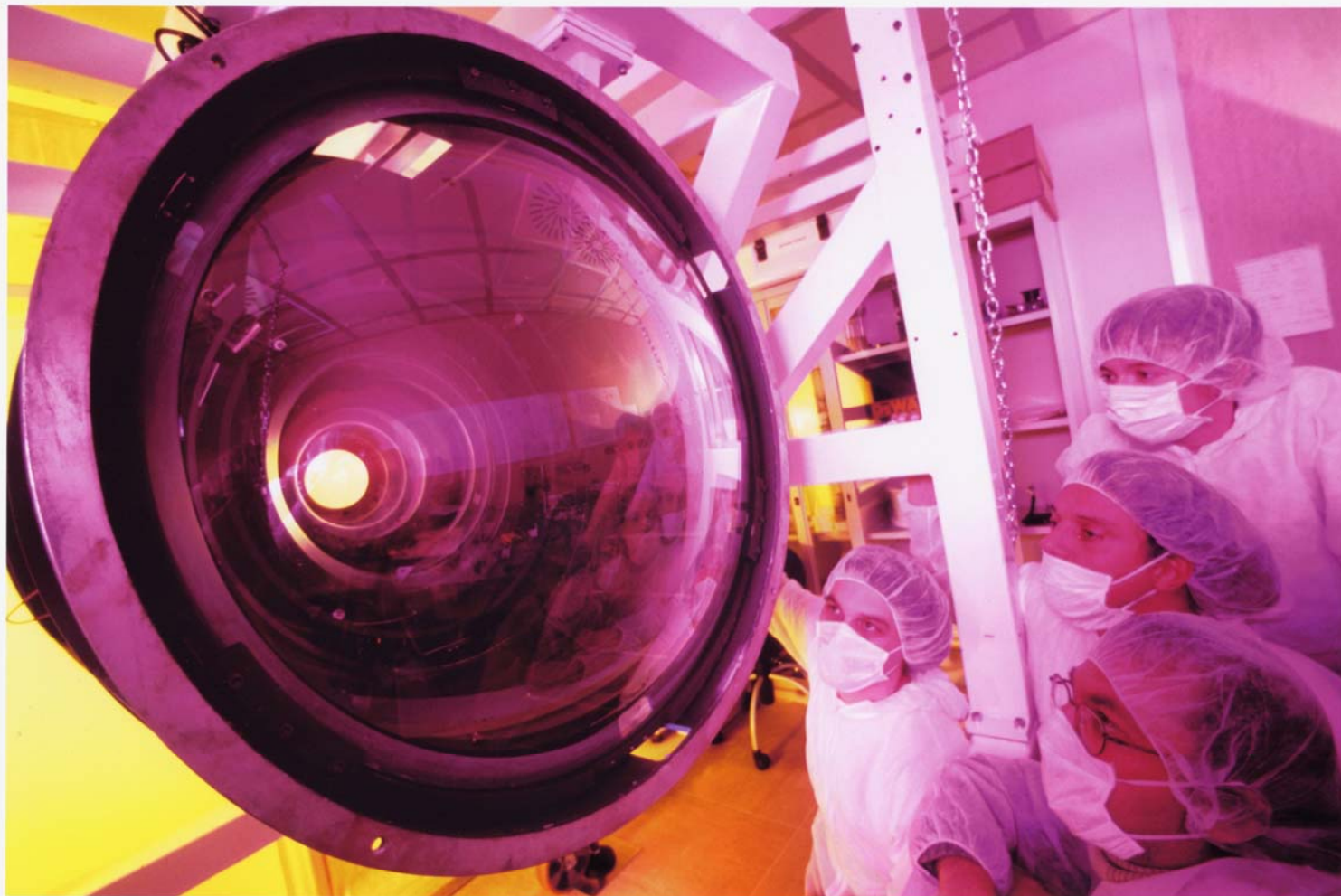
## A WorkShop in Munich, May 29<sup>th</sup> 2009



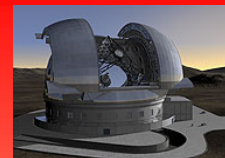




# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009



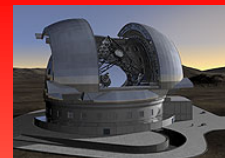
RENATO CERISOLA  
FOTOGRAFO



# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009







# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009







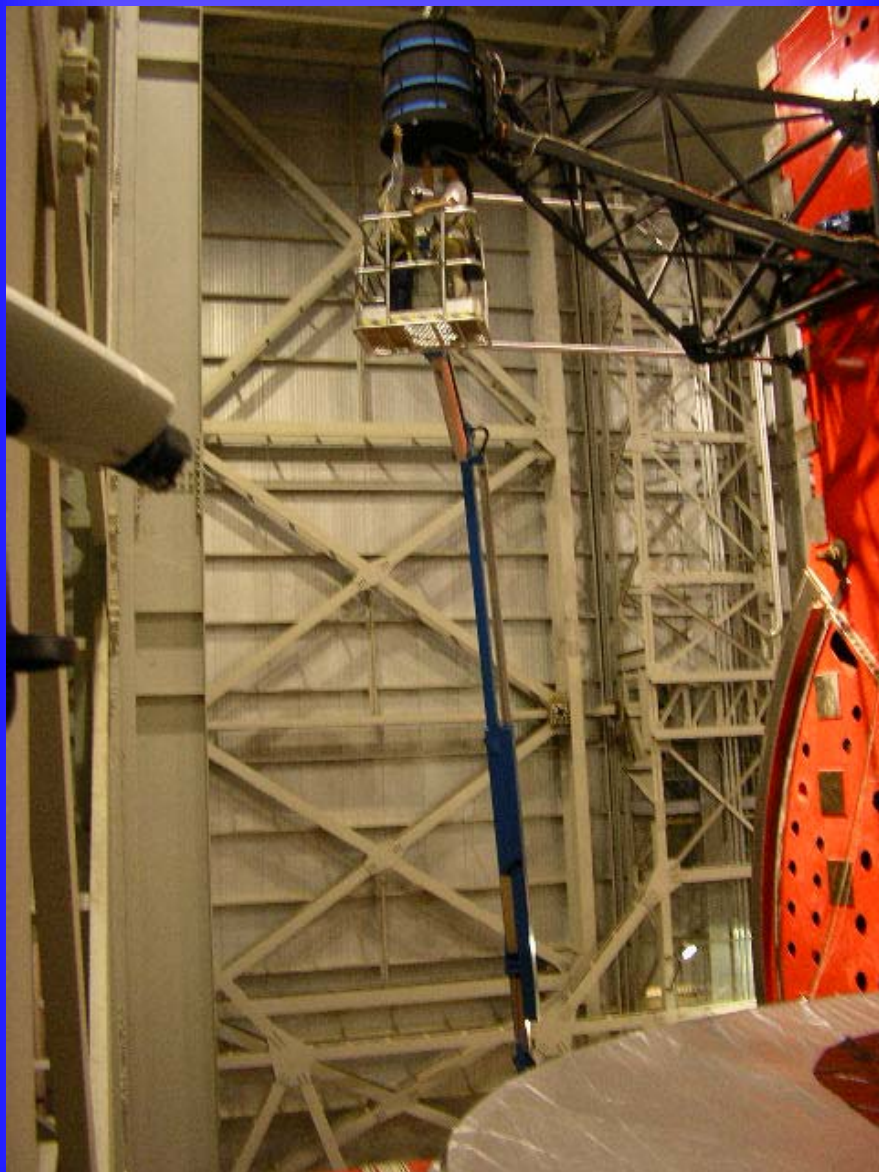
# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009







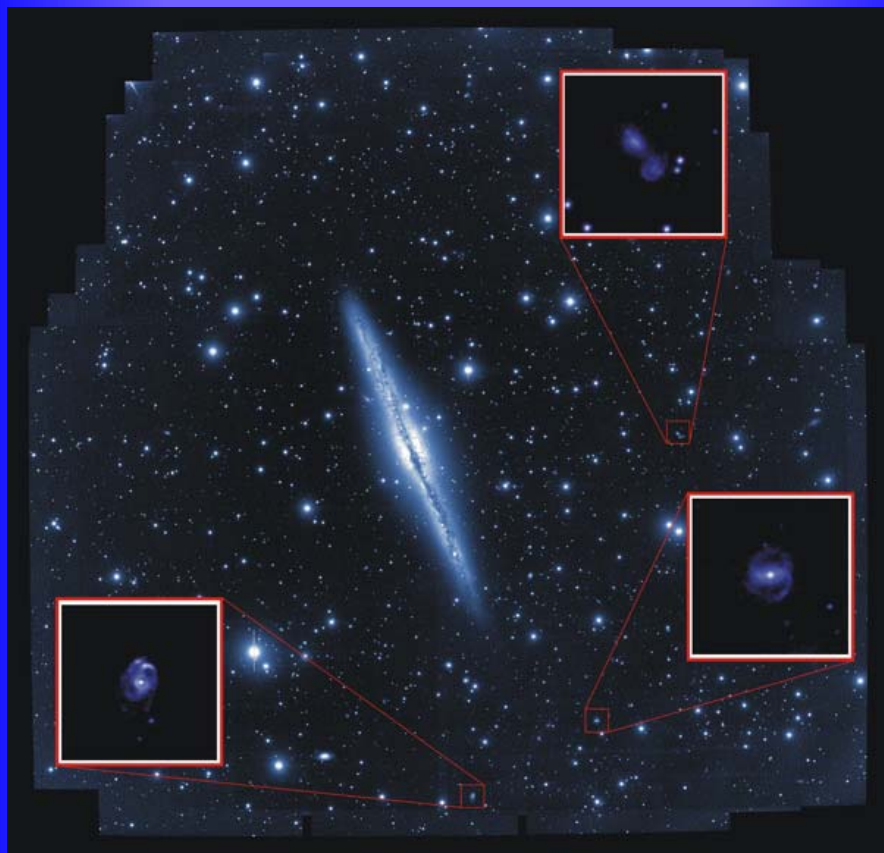
# Imaging at the E-ELT A WorkShop in Munich, May 29<sup>th</sup> 2009





# Imaging at the E-ELT

A WorkShop in Munich, May 29<sup>th</sup> 2009

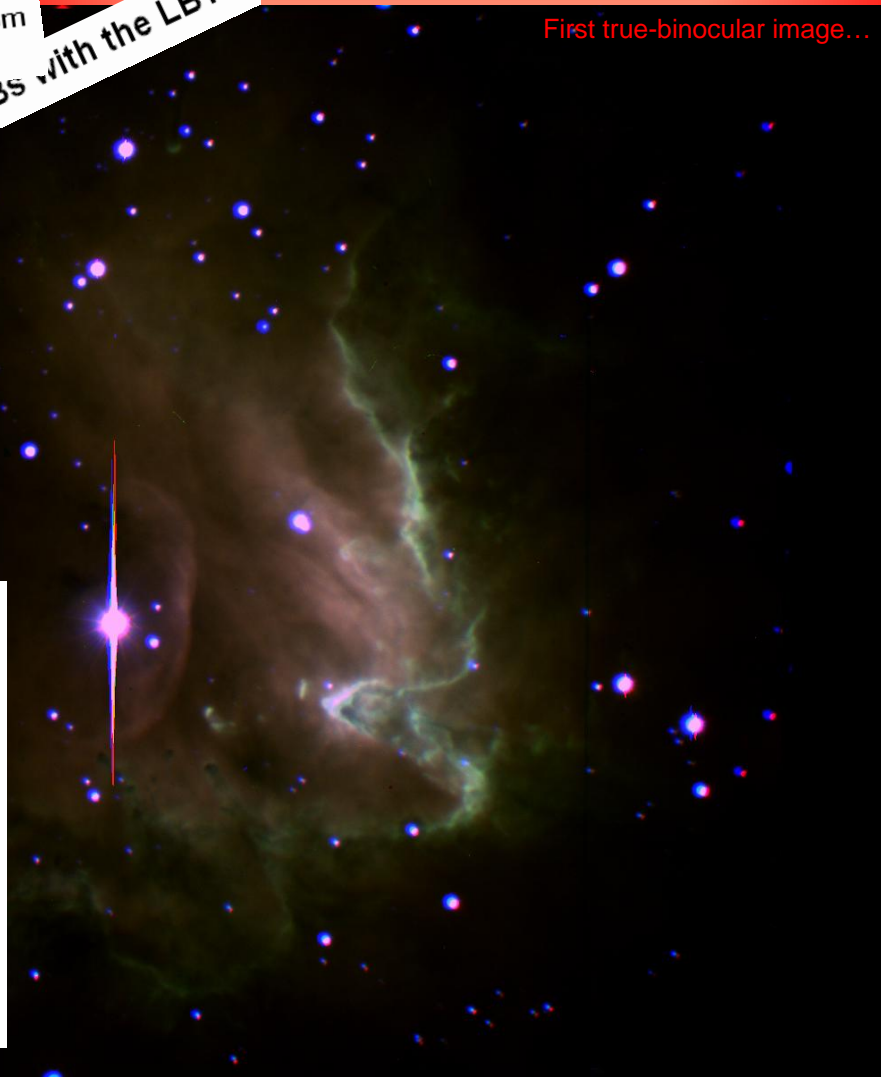






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First true-binocular image...



Meroidal Galaxy from

breaks for Swift-Era GRBs with the LBT

The Astrophysical Journal Letters, 668:L43-L46, 2007 October 10  
© 2007. The American Astronomical Society. All rights reserved. P  
DOI: 10.1086/522672

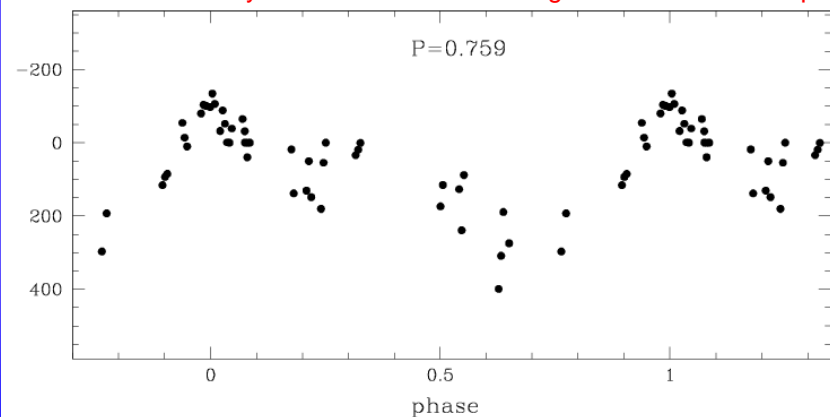
The Elongated Structure of the Hercules  
Deep Large Binocular Telescope Image

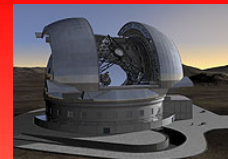
Go Long, Go Deep: Finding  
1 Deep Large Binocular Telescope Image

The Astrophysical Journal, 672:L13-L16, 2008 January 1  
© 2008. The American Astronomical Society. All rights reserved. Printed in U.S.A.  
DOI: 10.1086/525559

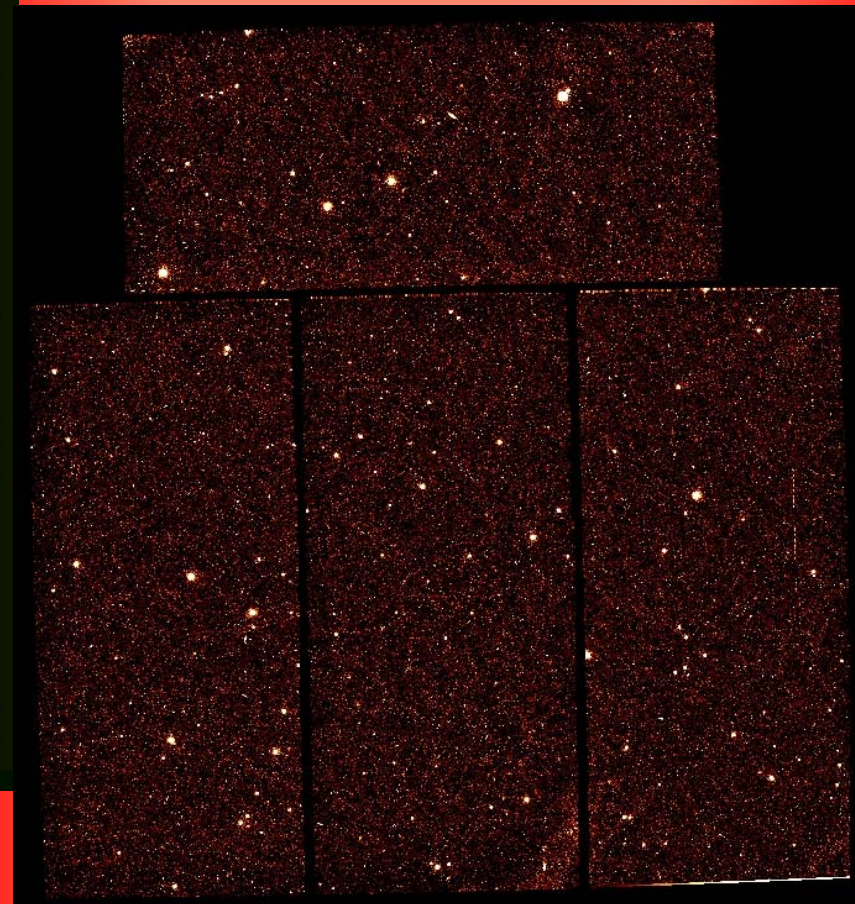
1 Deep Large Binocular Telescope Image

First RR-Lyrae found in M31 from a ground based telescope





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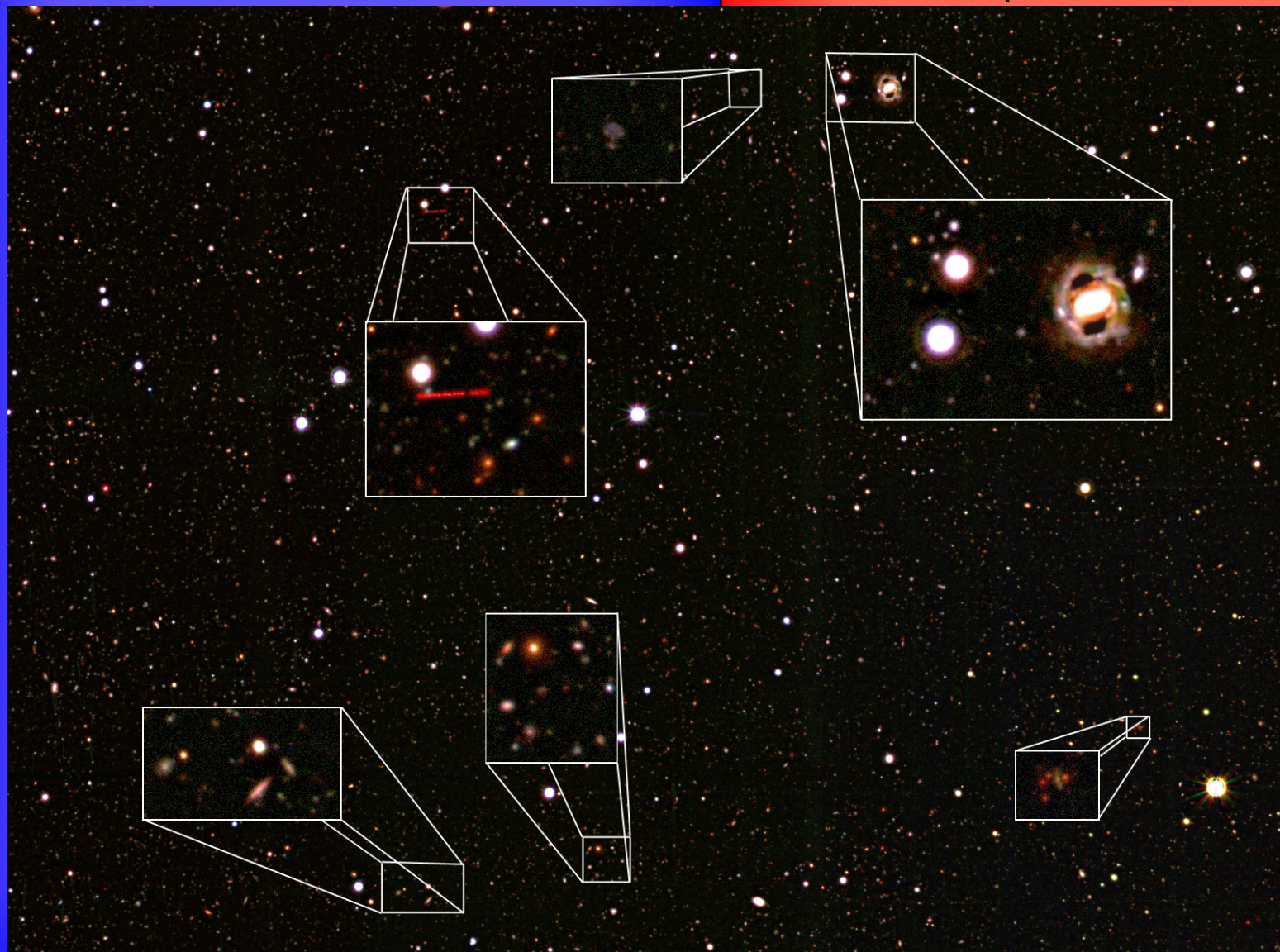
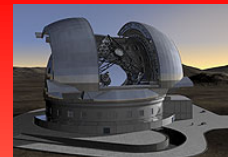


Peak performances:  $\sim 0.4$ arcsec in U ---  $0.5$ arcsec in V

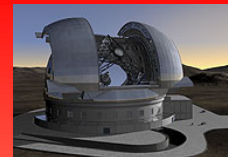


Subaru deep field (11.6h in U band)

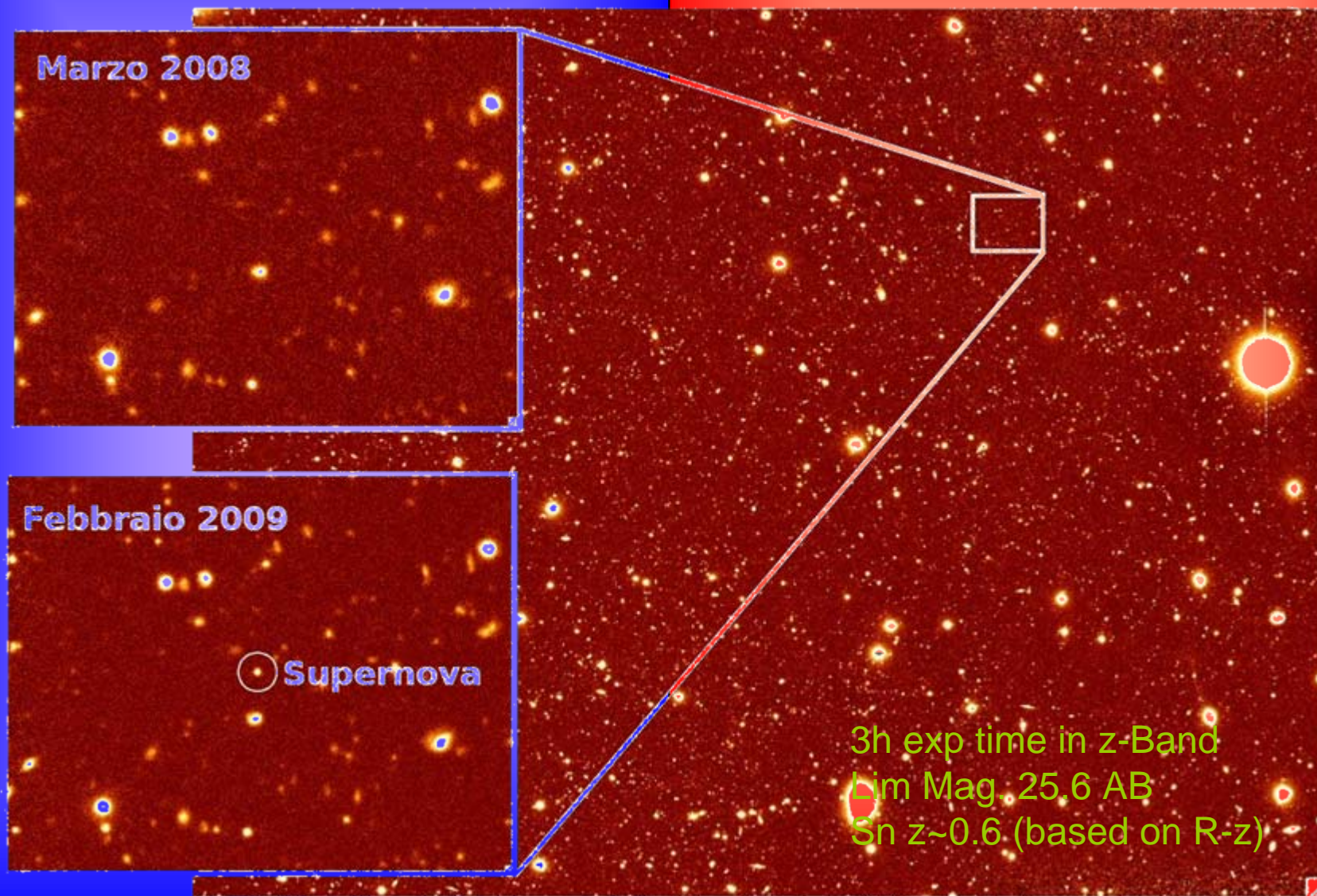
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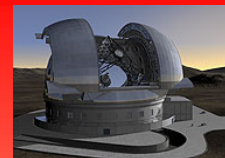






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