

Serious Amateur Astronomy: Linking with Professionals

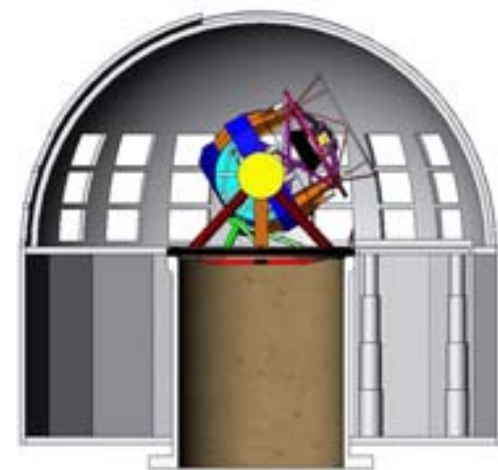
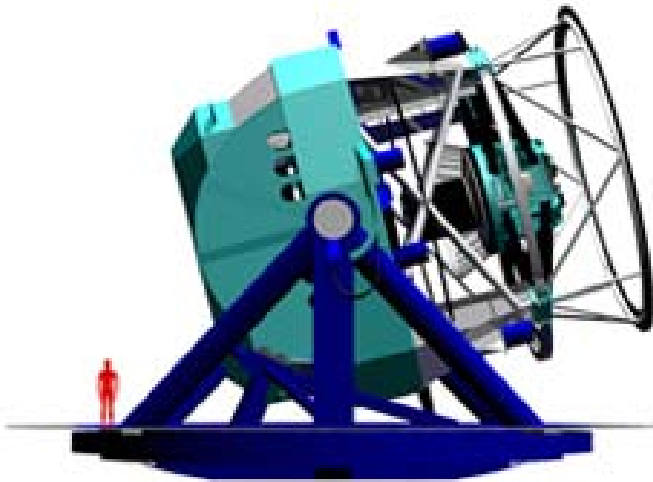
Dr. Patrick Seitzer
Dept of Astronomy
University of Michigan

Astronomers have too much data.

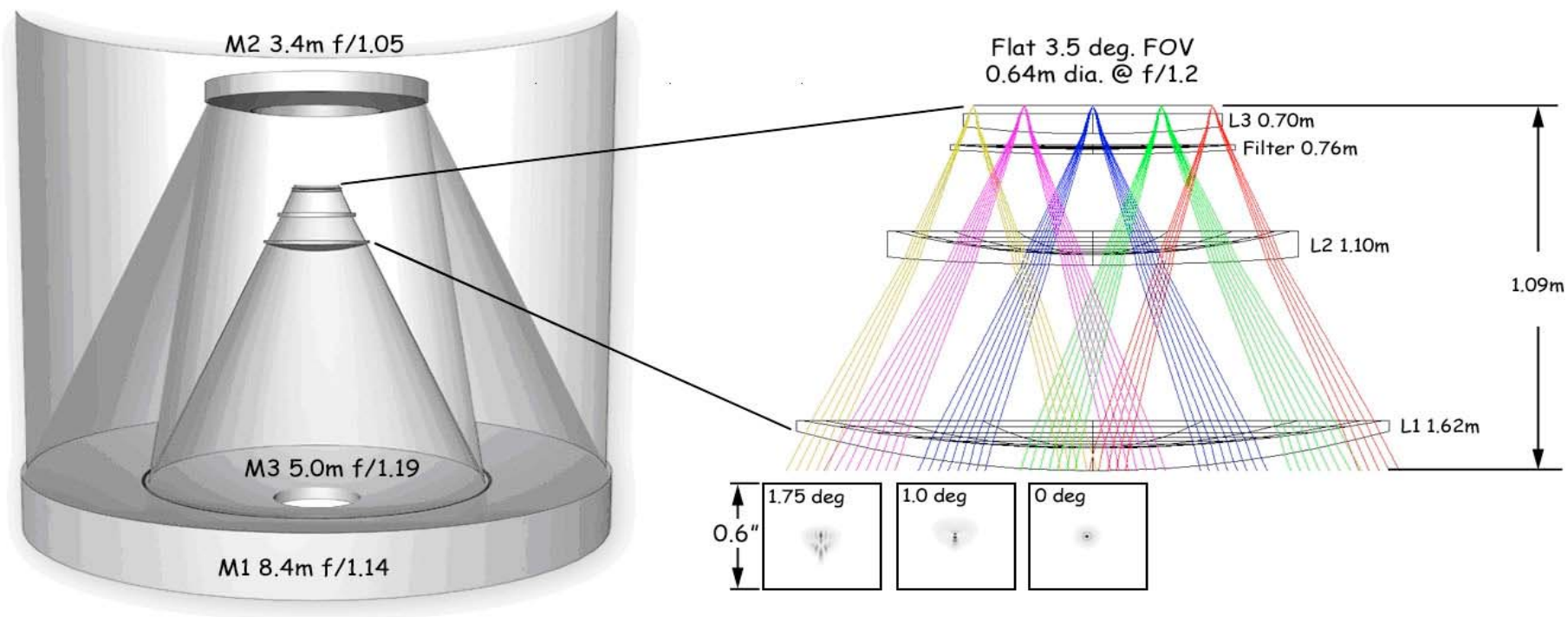
And the problem is about to get much, much worse

LSST - Large Synoptic Survey Telescope

Cerro Pachon, Chile > 2010 ?



Survey the entire southern sky at least once per week!



Pan-STARRS - now!

- 1.8-m 3 deg FOV in Hawaii
- First light earlier this year
- Survey sky from Hawaii at least once per week!
- Eventually 4x1.8-m

Amateurs ?

- Data mining - archives future and present.
- Follow-up observations
 - Very short time-scales
 - Geographical location - South Africa - Chile
 - Australia for complete 24 hour coverage

Technical issues

- Use standard professional filters

Johnson UBV, Kron-Cousins RI

do not use Johnson RI, rgb, etc

Sloan filters - uvgr (LSST & Pan-STARRS)

Accurate time of observation - much better
than 1-second - start time and duration.
How verify?

Largely ignored by professionals -

Bright Stars!

$V < 18$?