

DM and Automated Summit Services

Kian-Tat Lim

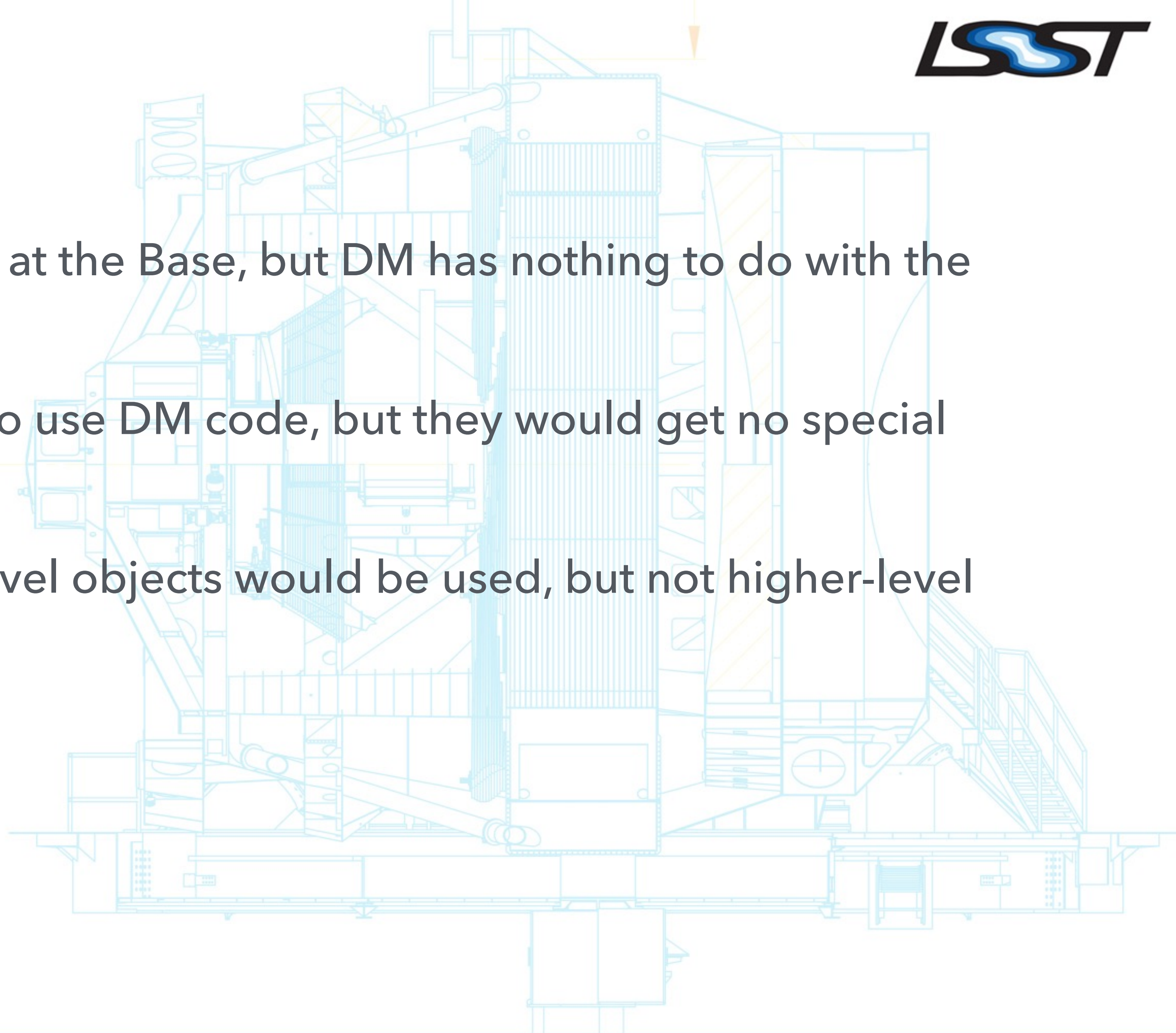
The logo for the Large Synoptic Survey Telescope (LSST). The letters 'LSST' are rendered in a bold, black, sans-serif font. The letter 'S' is filled with a blue-to-white gradient, giving it a three-dimensional, glowing appearance. The letters are outlined in white.

Large Synoptic Survey Telescope

Originally

Isolation between subsystems

- Not only does DM only operate at the Base, but DM has nothing to do with the Summit.
- Summit systems could choose to use DM code, but they would get no special support or custom code.
- The expectation was that low-level objects would be used, but not higher-level middleware or control systems.



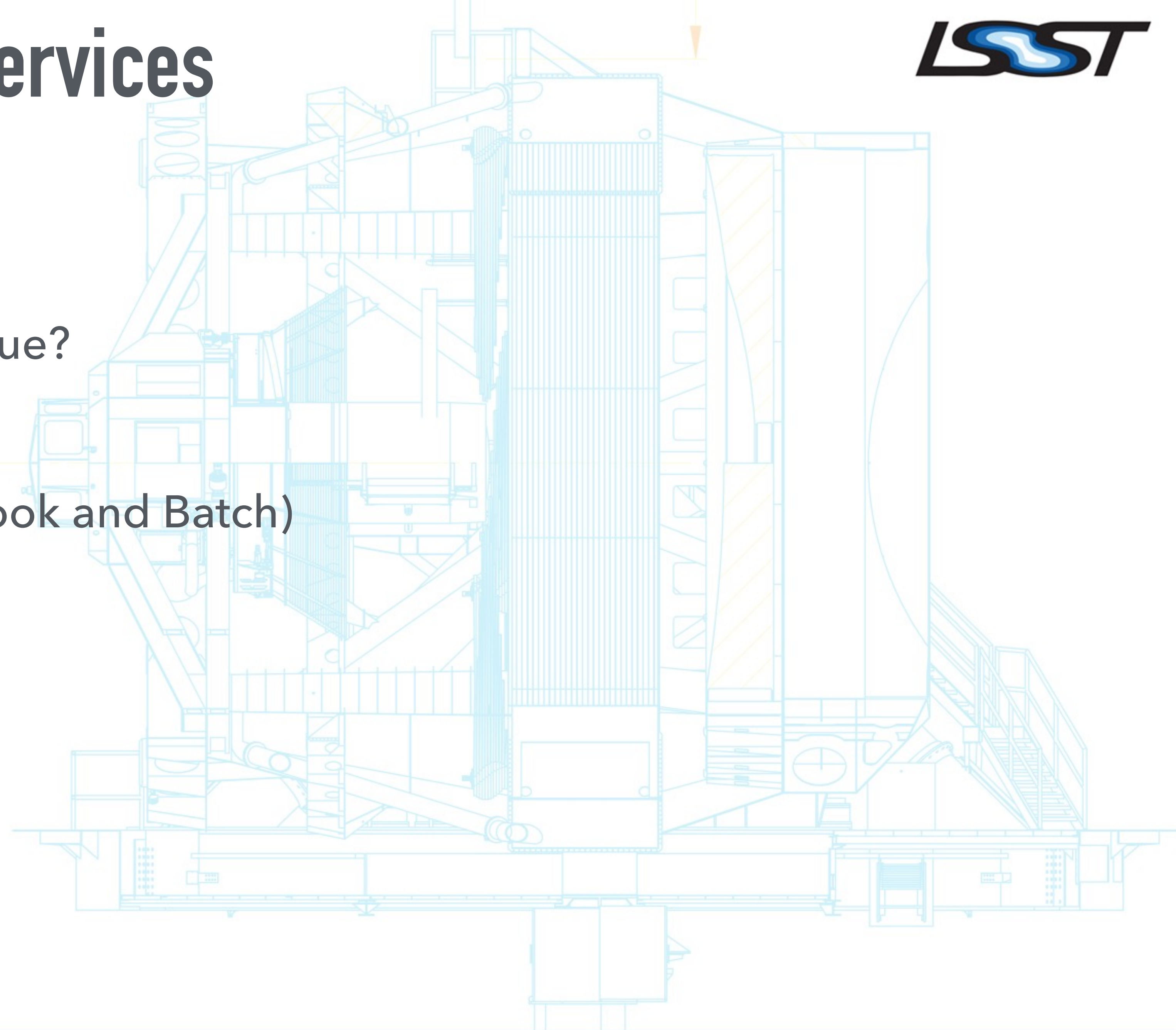
Today

DM in control loops

- Wavefront sensor processing for active optics
 - Includes ISR
- Guider image centroiding
- LATISS positioning and focus
- Camera Diagnostic Cluster analysis and visualization
- Commissioning and calibration scripts executed by Script Queue
 - Combine CSC control with analysis of images (or telemetry)
- (T&S CSCs running in full Science Pipelines environment)

Compute Systems and Services

- Per-CSC servers/clusters
 - T&S: AOS, Guider, Script Queue?
 - Camera: Diagnostic Cluster
- Commissioning Cluster (Notebook and Batch)
- NCSA Cluster
- OCS-Controlled Batch
- Prompt Processing
- Direct Script Queue execution?



Storage Services and Butler Repositories

- ? Summit Shared Filesystem
- ? Camera Diagnostic Cluster internal storage
- Observatory Operations Data Service
- ? Commissioning Cluster file workspace
- Data Backbone

