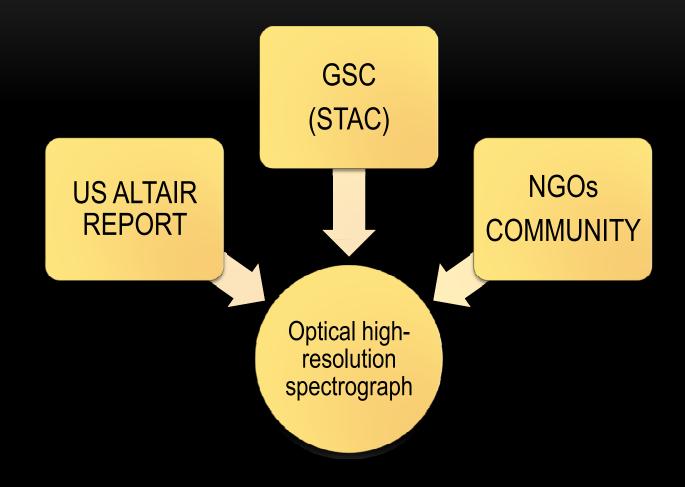
# THE SCIENCE OF GHOS

Steven Margheim

**GHOS PROJECT SCIENTIST** 

## FROM DEMAND TO DESIGN



#### WHITE PAPERS

The Case for an Ultra-High Precision Radial Velocity Spectrograph at Gemini

ZEEMAN DOPPLER IMAGING WITH GEMINI

Stellar archaeology: Exploring the Universe with metal-poor stars

Nucleo-Chronometry of the Oldest Stars

Understanding the Assembly History of the Milky Way with Observations of Dwarf Galaxies

Getting Stellar Atmospheres Right

The Shapes of Dwarf Galaxies and their Dark Matter Content: An Opportunity for Gemini

**Extremely Metal-poor Stars** 

Spectropolimetry

EXTRA-GALACTIC GLOBULAR CLUSTERS

Cool Dwarfs : New insights

Extreme Metal-Poor Stars in Ultra Low-Luminosity Dwarf Galaxies and the Galaxy

Galactic Structure in the Survey Age

Fundamental Astrophysics with Open Clusters

Stellar Chemistry in Stars with Planets as a Probe of Planetary Interstellar Molecules



# CONCEPTUAL DESIGN PHASE





Exploring the Universe, Sharing its Wonders

#### SCIENCE CASES

- Near-field Cosmology
- ★ Stellar Astrophysics
- ★ Another tool in the Gemini ToO workshop
- ★ GAIA, SSS, LSST

### **GHOS COMMUNITY**

# **EXISTS NOW**