SOLAR OBSERVATORY VISITOR CENTER in TWO ACTS:
Familiar Conditions and Polar Extremes

Arch 2504 Design Studio IV explores the role of sunlight and terrain in generating two site specific idiosyncratic proposals for a *Solar Observatory Visitor Center*. This exploration builds upon the investigative studies by Peter Eisenman in Palladio Virtuel to exploit Palladio's nuanced design decisions towards celestial and terrestrial alignments. Two differing latitudes, one within familiar temperate region of 33 degrees latitude, the other approximates the poles at 78 degrees latitude, offer contrasting sites from which core spatial arrangements will be situated.

Students will develop their *Solar Observatory Visitor Centers* in three phases: Palladian Impression, Familiar Latitude, and Polar Extremes. Working from core spatial arrangements derived from the analysis of classically symmetrical precedents, proposals will incorporate elemental adjustments that respond to the solar and terrain context. Tools, such as the sun peg, solar polar chart, slope analysis, and contour grading will facilitate site specific testing. Designs will address direct and indirect natural lighting, while resolving various slopes with accessible circulation. Additionally, these visitor centers will address sub-ground, ground, and above ground conditions with an attitude towards materiality. Each student will develop a latitude appropriate design accommodating the sun patterns and terrain specific to our own tabletop Llano Estacado Yellow House Draw and the distant cavernous Longyearbyen region of Svalbard, Norway.

This semester the studio prioritizes models as the critical design medium for performance-based testing. Evidence of success work is made through a feedback process of proposing, testing, and refining natural light effects and contour slope conditions. Drawings of sectional and scalar magnitude serve to further understand relational consequences of site-conscious design decisions.

And as the final semester within the foundational studio sequence, this course continues previous studio formats of a share syllabus and coordinated project prompts to maintain cross-section comparative learning opportunities and promote collective discussions.