

## **THE UNIVERSE AND ART**

### **THE POWER OF THE STARS: A HIGHLIGHTS TOUR WITH PROFESSOR BRYAN PENPRASE**

**Saturday – 17 June | 5:00pm – 6:00pm**

#### **About Bryan Penprase**

Bryan Penprase is a Professor of Science at Yale-NUS College and the inaugural Director of the Yale-NUS College Teaching and Learning Center. Professor Penprase received both a BS in Physics and an MS in Applied Physics from Stanford University in 1985, and a PhD from the University of Chicago in Astronomy and Astrophysics in 1992. He was a National Research Council NRC Postdoctoral Fellow at Caltech, a visiting Downing Fellow at Cambridge University and held a Visiting Associate appointment at Caltech. Dr. Penprase was a professor at Pomona College between 1993 and 2016, and was awarded the Frank P. Brackett Professorship in 2007. During 2012-13, he was awarded an American Council on Education (ACE) fellowship at Yale University, where he advised Yale's president on STEM education, online learning and diversity initiatives, as well as co-authored the planning document for the Yale-NUS College curriculum. He also served on the Yale Summer Bridge Program Advisory Committee, and developed a conference on The Future of Liberal Arts in India at the RRI Bangalore campus in 2014. In 2016, Professor Penprase was inducted into the National University of Singapore Teaching Academy, which advises the university on matters related to teaching and learning, faculty development and the Scholarship of Teaching and Learning.

Professor Penprase's research includes nearly all aspects of observational astrophysics, from photometric observations of nearby asteroids to spectroscopic studies of element formation in the Early Universe, using telescopes such as the Hubble Space Telescope and the Keck Telescope in Hawaii. He has served on numerous NSF and NASA review panels, including the Hubble Space Telescope Time Allocation Committee and the NASA/Keck Time Allocation Committee, and has participated in the external review of the Five College Astronomy Programme. Professor Penprase is the author of *The Power of Stars – How Celestial Observations Have Shaped Civilisation*.

#### **About *The Power of the Stars – How Celestial Observations Have Shaped Civilisation***

*The Power of the Stars* explores the influence of the sky on both ancient and modern civilisation, by providing a clear overview of the many ways in which humans have used the stars as an ordering principle in their cultures, and which today still inspire us intellectually, emotionally and spiritually.

The book explores constellation lore from around the world, celestial alignments of monuments and temples, both from ancient and modern civilisations, and the role the sky has played in the cultures of the Greek, Egyptian, Babylonian, Native American, Chinese, Mayan, Aztec, and Inca. Models of the universe from each of these cultures are described clearly, and each culture's explanation of the stars, planets, and other celestial objects are described. The roots of astronomy and astrology are presented with original imagery and reproductions of ancient manuscripts that portray the structure of the physical universe as conceived by a diverse array of human cultures over the centuries. Our own scientific Big Bang cosmology and the origin of stars and elements are discussed in a philosophical context, to explore how we as modern people learn about the universe, and incorporate the findings of science into our world views. A concluding chapter provides a summary of modern science's effort to unlock the celestial secrets from the sky and from past civilisations, and what these answers mean for us today.