

Conference Frontiers of Quantum and Mesoscopic Thermodynamics 2022

Public Lectures of Guy Consolmagno and Harrison Schmitt with Concert

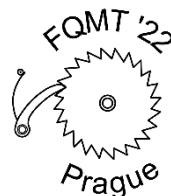
Main Hall of the Pyramida Hotel
Thursday August 4, 2022

17:00 – 17:15	Music introduction
	Opening address
17:15 – 18:15	Guy Consolmagno: “Astronomy, God, and the Search for Elegance”
18:15 – 18:30	Discussion
18:30 – 18:45	Break
18:45 – 19:45	Harrison Schmitt: “From Coyotes to Moonbeams”
19:45 – 20:00	Discussion
20:00 – 20:30	Break
20:30 – 22:00	Concert

Music Introduction

A. Dvořák (1841 - 1904)
M. Kejmar (trumpet)
J. Thuri (English horn)
J. Kšica (piano)

“Fanfares” and Largo from
the New World Symphony



<https://fqmt.fzu.cz/22/>

Astronomy, God, and the Search for Elegance

Guy Consolmagno

Specola Vaticana, Vatican City State

Scientific theories must do more than merely satisfy the data; they must do so in a way that is (to use a term much favored by mathematicians) “elegant.” Kepler, Maxwell, and Einstein are examples of scientists who found that a sense of esthetic “rightness” helped them to direct their scientific intuition toward theories that could then be expressed rationally and mathematically... theories that could lead to deeper insights about nature. By looking closely at a handful of astronomical images, we'll explore the way that one proceeds from an emotional appreciation of the beauty of the stars and planets, to an understanding that satisfies both reason and emotion. Ultimately, this link between “elegance” and rational truth has profound philosophical and theological implications.

Guy Consolmagno

Guy Consolmagno is an American research astronomer, physicist, and Jesuit brother. In 2015 Pope Francis appointed him the Director of the Vatican Observatory.

Guy attended the University of Detroit Jesuit High School (1970), then earned S.B. (1974) and S.M. (1975) degrees at Massachusetts Institute of Technology and his Ph.D. (1978) at the University of Arizona's Lunar and Planetary Laboratory, all in planetary science. After postdoctoral research and teaching at Harvard College Observatory (1978-1980) and MIT (1980-1983), in 1983 he joined the US Peace Corps to serve in Kenya for two years, teaching astronomy and physics at the University of Nairobi.

After his return to the US, he took a position as Assistant Professor at Lafayette College in Easton, Pennsylvania. He entered the Society of Jesus in 1989 and following philosophy and theology studies he was appointed as an astronomer to the Vatican Observatory (*Specola Vaticana*) in 1993. There he served as curator of the Vatican Meteorite collection until his appointment as the Observatory's Director.

His research centers on the physical properties of meteorites and asteroids. During 1996, he took part in the Antarctic Search for Meteorites, ANSMET, which discovered 400 meteorites on the ice fields of Antarctica.

Guy served as the Chair of the Division for Planetary Sciences of the American Astronomical Society (2006-2007), serves on the International Astronomical Union's working group on Planetary System Nomenclature, and will be the upcoming president of the Meteoritical Society. He has received honorary doctorates from Georgetown, Santa Clara, Fairfield, and St. Joseph's Universities, and is a Fellow of the Meteoritical Society.

In addition to 400 scientific papers and abstracts, he is a prolific writer of popular science articles and has co-authored several popular books on astronomy, notably *Turn Left at Orion* (with Dan Davis) and *Would You Baptize an Extraterrestrial* (with Fr. Paul Mueller). In 2014, he was awarded the Carl Sagan Medal for outstanding communication by an active planetary scientist to the general public.

For more information about Br. Consolmagno and the Vatican Observatory, visit www.VaticanObservatory.org.

From Coyotes to Moonbeams

Harrison H. Schmitt

University of Wisconsin-Madison, USA

The last Apollo mission to the Moon, Apollo 17, left Earth on a huge Saturn V rocket on December 7, 1972 to land in the deep Valley of Taurus-Littrow, carved through the magnificent mountain rim of the Serenitatis impact basin. On December 11, 1972, as the Lunar Module Pilot, New Mexican, and geologist Harrison Schmitt became the 12th and last Apollo astronaut to step on the Moon. For 75 hours, he lived and worked in the valley, performing extensive geological studies of volcanic rocks, boulders that had rolled down from the surrounding mountains, and the meteor impact generated soils (regolith) that cover the valley floor and walls. Over 22 hours of successful exploration of Taurus-Littrow capped Apollo's six-mission investigation of the materials and history of the Moon. His synthesis of the observations, samples and photographs from the Apollo missions and subsequent orbital spacecraft continues to this day. At the initial conclusion of these studies, however, science had gained a first order understanding of the evolution of the Moon as a planet and of the earliest history of the Earth during which life began and evolved. Humankind also has gained knowledge of new resources in the soils of the Moon that may provide energy for use on the Earth and help initiate the exploration and settlement of Mars.

Harrison H. Schmitt

Harrison Schmitt walked on the Moon in December 1972 as the Lunar Module Pilot of Apollo 17. One of the twelve moonwalkers, he is the last person to step on the Moon and, as a geologist, he is the only scientist-astronaut to do so. He received his Bachelor's degree in Science from Caltech and a PhD in geology from Harvard and became a qualified T-38 jet pilot with the United States Air Force and H-13 helicopter pilot with the United States Navy.

Dr. Schmitt spent two weeks in space, recording his observations of the geology of the valley of Taurus-Littrow and collecting 240 pounds of documented Moon rocks during 22 hours of lunar exploration. The extensive field context he provided for those lunar samples is unique among the Apollo missions. He continues to integrate the results of 50 years of ongoing lunar research by his colleagues with his field observations. This work includes continued examination of the terrestrial and space propulsion potential of lunar helium-3 fusion power.

Program of the concert

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|---|---|
| P. J. Vejvanovský (1640 - 1693)
J. Thuri (oboe)
J. Kšica (piano) | Sonata
Grave, Largo, Allegro |
| L. van Beethoven (1770 - 1827)
T. Víšek (piano) | Sonata quasi una fantasia, op. 27, No. 2 “Moonlight sonata”
1 st Movement |
| E. Bozza (1905 - 1991)
J. Thuri (oboe)
J. Kšica (piano) | Fantaisie |
| C. Debussy (1862 - 1918)
T. Víšek (piano) | Clair de lune |
| Traditional Japanese song
M. Kejmar (flugelhorn)
J. Thuri (oboe)
J. Kšica (piano) | Kōjō no Tsuki (Moon over the Ruined Castle) |
| M. Müller
T. Víšek (piano) | Space (piano Suite)
I. Adagio non troppo - II. Vivo leggiero - III. Andante - IV. Allegro - V. Adagio |
| F. Schubert (1797 - 1828)
P. Kšica (bass)
T. Víšek (piano) | Sehnsucht, op.39 |
| R. V. Williams (1872 - 1958)
P. Kšica (bass)
T. Víšek (piano) | Silent Noon |
| L. Bernstein (1918 - 1990)
P. Kšica (bass)
T. Víšek (piano) | There is a law , Sam's Aria from opera Trouble in Tahiti |
| Jindra Nečasová Nardelli
T. Víšek (piano) | Space Cathedrals |
| H. Mancini (1924 - 1994)
M. Kejmar (flugelhorn)
K. Romansová (singer)
Jan Kejmar trio | Moon River |

H. H. Carmichael (1899 - 1981)

M. Kejmar (flugelhorn)

Aleš Háva (piano)

Jan Kejmar (bass guitar)

Stardust

Stevie Wonder

M. Kejmar (flugelhorn)

K. Romansová (singer)

Jan Kejmar trio

Moon Blue

Bart Howard (1915 - 2004)

M. Kejmar (flugelhorn)

K. Romansová (singer)

Jan Kejmar trio

Fly Me to the Moon

Harold Arlen (Hyman Arluck)

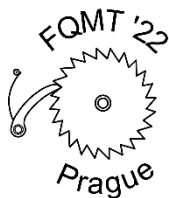
(1905 – 1986)

M. Kejmar (flugelhorn)

K. Romansová (singer)

Jan Kejmar trio

Over The Rainbow



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Performers

Miroslav Kejmar (trumpet)

Miroslav Kejmar graduated from The Prague Conservatory after studies with Professor Junek. He then studied in the class of Professor Václav Pařík at The Prague Academy of Arts. Already during his studies at The Academy of Arts in Prague, he played in various orchestras, e.g. in the Film Symphony Orchestra and the Czech Philharmonic Orchestra. Apart from guest appearing with several chamber brass ensembles, he works on a permanent basis with the Prague Brass Soloists, of which is a founding member. His career as a soloist is equally wide-ranging. He is well known to audiences in many European countries, as well as Japan. Apart from classical music, he is also interested in dance, jazz and popular music. For about three years he played in the orchestra involved in the famous musical, Jesus Christ Superstar. He was a member of the Karel Vlach orchestra. Miroslav Kejmar was, over thirty years, the first trumpeter of the Czech Philharmonic Orchestra, and played many years with the “Ten of the Best” ensemble, the famous international group of trumpeters. He nowadays plays frequently as a soloist; he is a member of the Prague Brass Soloists and Czech Philharmonic Brass ensembles.

Jan Kejmar Trio

Aleš Háva: piano
Jan Kejmar: bass guitar
Pavel Razím: drums

Jan Kejmar (bass guitar)

Jan Kejmar started as a violinist and he began playing the trumpet at the age of twelve. He graduated from the Prague Conservatory and the Jaroslav Ježek Conservatory. He gained his first orchestral practice at the age of fifteen in the Vladislav Brož Dance Orchestra. While still a student, he helped at the Prague Symphony Orchestra (FOK), the Czech Radio Symphony Orchestra and the Czech Philharmonic. He performed briefly in the orchestra of the musical Hair and for more than three years he worked in the orchestra of the musical Jesus Christ Superstar. Since then, his interest has focused mainly on dance, jazz and popular music. For many years he worked in the Karel Vlach Orchestra, in the orchestra of the Karlín Music Theater and in other, mainly jazz orchestras. He collaborated with Petr Kotvald and occasionally performed with Helena Vondráčková in her accompanying group Charlie Band. Since 2016 he has been playing the bass guitar. He worked as a bass player in the orchestra of Václav Hybš, in the musical At Lives Ghosts, Rocky and Mamma Mia. He currently performs in the musical Tarzan, project Four Tenors and occasionally performs with accompanying orchestras of various singers and soloists, e.g., B. Basiková, B. Matuš, S. Hložek, P. Vitek, J. Uhlíř et al.

Josef Kšica (harpsichord)

Josef Kšica studied organ at the Conservatory in Brno and at the Academy of Performing Arts in Prague in the class of professors Milan Šlechta and Jiřina Pokorná. In addition, he studied composition with Professor Jan Duchoň. After many years of practicing as an organist and a singer of Czech leading choirs (Prague Philharmonic Choir, Prague Chamber Choir) Josef Kšica became the choirmaster in St. Vitus Cathedral in Prague. Beside these activities, he performs old Czech as well as world sacred music, occasionally in new premieres. He also cooperated with the specialist on Bach music, Professor H. Rilling. As an organist, Josef Kšica has been performing at concerts in his country and abroad. He has also been increasingly seen on the stage as a conductor. Aside from his interpretation achievements, Josef Kšica is a well-known scholar and editor for many European archives. Ars Instrumentalis Pragensis, in particular, is grateful to him for his continued broadening of their repertoire.

Pavel Josef Kšica (bass)

Pavel Kšica was born into a musical family in Prague and has been playing the piano since childhood. In 2015 he started to deal with choral singing and a year later solo singing. After graduating from high school, he was accepted to the Prague Conservatory, where he studies singing in the class of prof. Jiří Kubík. He continued with his singing education in the Convivium courses, where he devoted himself to the Baroque repertoire under the direction of the leading English early music expert James Gray. In 2022 he was accepted to the Academy of Performing Arts in Prague - HAMU, where he continues to study with Prof. Martin Bárta. He regularly performs concert on various occasions. He has been singing a solo bass part in the Czech Christmas Mass by J. J. Ryba every year since 2016. In 2018, he conducted a 160-member student ensemble in five successful performances of the same work. In 2018 and 2019 he played leading roles in H. Purcell's *The Tempest* (Neptune) and G. F. Handel's *Acis and Galatea* (Polyphemus) at the International Early Music Courses in Spálené Poříčí. In 2019 he was a guest at a Baroque opera concert as part of the Early Music Day festival in Wexford, Ireland. In the summer of 2021, he played the role of Jinoch of Athens in Bohuslav Martinů's opera *Ariadne*, as part of the Smetana's Litomyšl festival.

Kateřina Romansová (singer)

Kateřina Romansová is a singer with Moravian roots. She studied popular singing at the Prague State Conservatory, which she concluded in 2010 with a graduation concert accompanied by the Golem Orchestra of Jan Václavík. She acquired the basics of classical singing through private study with Professor Nina Krioutchková in Ostrava. During 18 years of singing on stages, she has toured a number of Ostrava and then Prague music groups, such as the Ostrava Radio Orchestra, the Czech Radio Big Band under the direction of Václav Kozel, the Golem of Jan Václavík, where she has worked as a soloist since 2008 or in collaboration with Karel Vágner. She is currently the offstage singer of the musical *Tarzan* at the Hybernia Theater, a soloist with Vladislav Drtina's *The Party Band* and a frontwoman for the *Takin Off*, *ROKA* and *ROKA Acoustic* bands. Her other singing successes include, for example, first place in the national singing competition *Czech Talent Zlín* or 2nd place and the Media Award in the international singing competition *Zlatá Črievička Slovakia Fest*.

Jan Thuri (oboe)

A leading Czech oboist Jan Thuri was born into a family of musician in Praha in 1975. He came in contact with art at an early age through playing violin and piano. He has been playing oboe since the age of thirteen. When he graduated from the Prague Conservatory in the class of his father František Xaver Thuri, he crowned his studies at the Utrecht College of Music with Ernest Rombout and at the Ostrava University with Dusan Foltyn. He also took part in a few excellent courses with Jean-Louis Capezzali, Maurice Bourgue, Han de Vries, Jérôme Guichard and Jacques Tys. During his studies he won many awards in international competitions (Czech Republic, France, Great Britain). Jan Thuri is a sought-after solo and chamber music player. He co-operates with the foremost local and foreign orchestras. As a soloist, Jan Thuri has played in virtually all countries of Europe, in the USA, Japan and Korea. He records for the radio stations Czech Radio, Radio France and the British BBC where he recorded the Richard Strauss oboe concerto in D major in live broadcast. In 2002 he founded the chamber orchestra "Thuri Ensemble" and he plays actively with them at home and abroad. Besides that, he is a member of several chamber orchestras, primarily ensembles specializing in the baroque style music, he is also a member of wind trio "Trio DuBois". In the exceptionally rich repertoire of Jan Thuri there are compositions of all styles and periods including contemporary and also avant-garde ones. The artist is often sought-after for the premiere interpretation of compositions of famous Czech and foreign contemporary composers. Jan Thuri has made a number of outstanding recordings for EMI, Virgo and Thuri Records. One of the most important pieces of work of Jan Thuri in the recent period of time is a collected recording of his father's concertos for oboe and orchestra. Since 2004 Jan Thuri has held oboe and chamber music classes at the Prague State Conservatory and performs master-classes in Europe and Asia (Japan, Korea). Jan Thuri is often invited to take part in juries for international competitions (Chieri, Wroclaw, Prague).

Tomáš Víšek (piano)

Tomáš Víšek developed his carrier as a solo pianist after graduating from the Prague Conservatory (Professors V. Kameníková and Z. Kožina), and from the Academy of Music Arts in the class of Professors J. Páleníček and Z. Jílek. He has established his reputation performing both famous and lesser-known repertoire, some of which being undeservedly neglected. He has toured throughout the world including Austria, Holland, Switzerland, France, Italy, Egypt, Japan, USA, and has made recordings for radio and television and on CDs. Tomáš Víšek won numerous prizes in international competitions (Hradec Králové, Vienna, Ragusa, Paris), in 2013 he won the 1st prize and CMF Prix at the "Concours Musical de France" in Paris, in 2015 the 1st prize at the competitions „Music Without Limits“ (Druskininkai) and „Grand Prize Virtuoso“ (video-competition), in 2016 he won the 1st prize at the „International Master Competition for Music Teachers“ in Warsaw, in 2021 the 1st Prize at the "Golden Classical Music Awards" (with the performance at the Carnegie Hall), in 2022 at the "Grand Prize Virtuoso" (with the performance at the Concertgebouw). His solo recital in the Prague Spring Festival in 1997 and the further performances there in 2002, 2003, 2006, and 2014 were met with high acclaim, as were his interpretation of Gershwin's Rhapsody in Blue in the sold out Rudolfinum concert hall in Prague.