

Committee on Education, Science, Culture, Human Rights and Petitions
of the Senate of the Parliament of the Czech Republic

Czech Academy of Sciences and Institute of Physics CAS

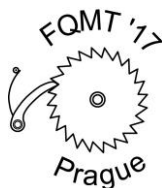
Frontiers of Quantum and Mesoscopic Thermodynamics Conferences
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Music Bridges International

Public Lecture of Pavel Kroupa and Concert

Main Hall of the Wallenstein Palace “C2”
Tuesday, May 17, 2016, 18:30

18:30 – 18:45	Introduction Opening address
18:45 – 19:45	Pavel Kroupa: “How culture determines our world view: a historical outline and evidence for a new cosmology”
19:45 – 20:00	Discussion
20:00 – 20:15	Break
20:15 – 21:00	Concert



SENATE
PARLIAMENT OF THE CZECH REPUBLIC

“How culture determines our world view: a historical outline and evidence for a new cosmology”

Pavel Kroupa

Helmholtz-Institute for Radiation and Nuclear Physics, University of Bonn, Germany

I will briefly discuss how religious and cultural development may have defined our present-day perception of cosmology with questions concerning how societies may evolve or stagnate: is a technological civilisation such as ours the natural outcome of every civilisation? Present-day cosmology is based on assuming Newtonian/Einsteinian gravitation to be valid, thus requiring dark matter particles and dark energy to be the major constituents of the Universe. I will show how this model disagrees with many modern observational results. Today we are in a situation similar to a few hundred years ago, when a main-stream or institutional view point (the geocentric model) dominated despite empirical evidence against it (e.g. the phases of Venus observed by Galileo and Kepler's solutions to the orbital motions of the planets). Hints at a new cosmological model are now emerging.

Pavel Kroupa

Pavel Kroupa (born September 24, 1963) is a Czech-Australian astrophysicist. He was born in former Czechoslovakia. His family fled from Czechoslovakia when Prague Spring failed in 1968. Consequently, Pavel Kroupa has lived in Germany, South Africa, England and Australia. He studied physics at The University of Western Australia in Perth and attained a doctorate at Cambridge University, England, in 1992. Afterwards Kroupa worked until 2000 in astronomical research groups at Heidelberg University and at the Max Planck Institute for Astronomy, before he went to the University of Kiel. Since 2004 he is leading the research group on stellar populations and stellar dynamics at the University of Bonn.

Pavel Kroupa is well known for his work on the distribution of stars. His research interests include the dynamical evolution of stellar systems, star formation, the structure and mass of the Galaxy, galactic dynamics and the dark matter content of galaxies. In 1990-1992 he derived from observational data, with Christopher A. Tout and Gerard Gilmore, the until today most robust distribution of the star masses at their birth. Together with Carsten Weidner he found that the physical maximum star mass is approximately 150 solar masses. In Heidelberg he presented the first stellar-dynamical computations of star clusters in which all stars are born as binary stars. He mathematically formulated and applied a theory of the evolution of binary stars, created the method of dynamical population synthesis, and predicted the existence of “forbidden binary stars”. In 1997 Pavel Kroupa, together with Ulrich Bastian, carried out the first precise measurement of the spatial movement of two extragalactic systems. He also discovered stellar-dynamic solutions for the satellite galaxies of the Milky Way without the need for exotic dark matter. As a result of his work, Pavel Kroupa has concerned himself increasingly with cosmology.



Program of the concert

H. I. F. Biber (1644 – 1704)
Y. Waldman (violin)

Passacaglia for solo violin
Sonata 16 from Mystery Sonatas
(Rosary Sonatas)

B. Marcello (1686 – 1739)
L. Hucek (bassoon)
J. Kšica (harpsichord)

Sonata in E minor
Adagio, Allegro, Largo, Allegretto

J. Suk (1874 – 1935)
T. Víšek (piano)

Spring, op. 22a – part I
Humoresque

Y. Waldman
Y. Waldman (violin)

Jerusalem of Gold, Fantasy for Violin

A. Dvořák (1841 – 1904)
Y. Waldman (violin)
T. Víšek (piano)

Sonatina in G major, Op. 100
Part 2: Larghetto, Part 4: Allegro



Performers

Luboš Hucek (bassoon)

He regularly performs with The Prague Symphony Orchestra. He first aroused considerable public recognition in 1981 when he won The International Prague Spring Festival at the age of 24 when he was already bassoonist of the Film Symphony Orchestra and The National Theatre Orchestra. He has played as a soloist with renowned orchestras at concerts in many countries of the world.

Josef Kšica (harpsichord)

He 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) Mr. 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 Mr. 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.

Tomáš Víšek (piano)

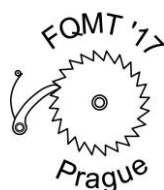
He developed a career as a solo pianist after graduating from the Prague Conservatory (Professors V. Kameníková and Z. Kožina), and from the Academy of Music Arts in the class of J. Páleníček and Z. Jílek. He has established his reputation performing both famous and lesser known repertoire, some of which being undeservedly neglected. He has toured throughout the world including Austria, Holland, Switzerland, France, Italy, Japan, and has made several recordings for radio and television and on CDs. Tomáš Víšek won numerous prizes at international competitions. 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" and "Grand Prize Virtuoso", in 2016 the 1st prize at the "International Master Competition for Music Teachers" in Warsaw. 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.

Yuval Waldman (violin)

Violinist and conductor Yuval Waldman has been described as "brilliant" (Musical America) and "spectacular" (The New York Times). Born in Russia, Waldman played his first public performance at the age of 8. He studied violin with Isaac Stern, Ivan Galamian, Joseph Gingold, Rene Benedetti, Lorand Fenyves and took part in Master classes with Joseph Szigeti, Nathan Millstein, Henryk Szeryng, Zino Francescatti. Raphael Kubelik, Jorge Mester, Leonard Bernstein, William Vaccano were his teachers of conducting.

Yuval Waldman made his New York debut on the International Series at Carnegie Hall, Jeunesse Musicales. He is a versatile performer who has earned acclaim both for his playing of the standard repertoire and for his thoughtful and stylish interpreta-

tions of Baroque music. He has also championed rarely performed nineteenth century masterpieces and commissioned or premiered works by contemporary American and Israeli composers. Yuval Waldman has appeared as a violin soloist with dozens of prominent orchestras in the United States, Canada, Europe and Israel and given recitals at Carnegie Hall, Lincoln Center, The Kennedy Center, Wigmore Hall in London and Concertgebouw in Amsterdam. He has performed with such artists as Isaac Stern, Pinchas Zuckerman, Jean-Pierre Rampal, Maureen Forrester and Henrik Szering. He is the first violinist in the acclaimed Kinor String Quartet and a winner of the America-Israel Cultural Foundation Prize and the Distinguished First Prize at the Conservatory of Geneva. He has recorded on the Angel, Newport Classics, Omega Classical, CRI, Musique International and Musical Heritage Society labels. His career as a conductor includes performances and recordings with several of the orchestras listed above, as well as the New American Chamber Orchestra, the Midatlantic Chamber Orchestra; the Philadelphia Chamber Orchestra and the Cologne Opera. He celebrated the fiftieth anniversary of the founding of Israel in Moscow and conducted the memorial concert on the steps of Congress on September 11, 2002. He was the founding music director of the Madeira Bach Festival, the Jefferson Music Festival in Washington D.C., the Opus Berkshire Festival in Massachusetts and the Benedictine Millennium Festival in Rome. He has served as director of the World Bank Mozart Festival and the Midatlantic Chamber Orchestra. In 2005, Maestro Waldman founded Music Bridges International, Inc., (www.musicbridgesinternational.com), to foster cross-cultural music exchange programs that feature the music of different countries.



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