

## **Celestial Journey: Talks, Rare Book Exhibit and Performance Interpret the Universe**

*Local scholars to discuss three one-of-a-kind, first edition books by revolutionary astronomers Ptolemy, Copernicus and Kepler on display; A Musical Feast to perform stellar works by composers with astronomical themes*

(Buffalo, NY, January 18, 2018) Scientists, like artists, study materials, people, culture, history, religion, mythology—and learn to transform information into something else. In collaboration with A Musical Feast, ([www.amusicalfeast.com](http://www.amusicalfeast.com)) the chamber music group created by retired Buffalo Philharmonic Orchestra Concertmaster Charles Haupt, the Burchfield Penney Art Center at SUNY Buffalo State will present *Celestial Journey*, a two-day celebration of talks, rare book exhibit and performances paying tribute to composers and astronomers who looked to the heavens to see the world in new ways.

### **Day 1 - Thursday, February 7, 2019**

**The Milestones of Science Exhibit** (on view Tuesday, January 22 - Sunday, February 10, 2019)

The relevance of science can hardly be overstated; it dominates the world in which we live. Discoveries made by stargazers Claudius Ptolemy (AD c100-170), Nicolaus Copernicus (1473 - 1543) and Johannes Kepler (1571 - 1630) helped us to understand the vast universe in which we live.

In collaboration with the Buffalo and Erie County Public Library (B&ECPL), The Center is honored to display three one-of-a-kind, first edition books by these revolutionary astronomers as part of *Milestones of Science*, a collection of rare books by world famous early scientists that form a veritable history of science.

Acquired in the late 1930s by the Buffalo Museum of Science, they are now housed by the B&EPCL. *The Almagest* (Ptolemy, 2<sup>nd</sup> Century AD), *De revolutionibus* (Copernicus, 1543) and *Harmonices Mundi* (Kepler 1619) will be on view Tuesday, January 22 thru Sunday, February 10, 2019.

The display will mark three milestones--the 546<sup>th</sup> birthday of Polish-born Renaissance scientist, Nicolaus Copernicus (b. February 19, 1473), 400<sup>th</sup> anniversary of the release of Johannes Kepler's *Harmonices Mundi* (1619) and the first time the B&ECPL has shown all three works together.

*Free with museum admission*

**Panel Discussion - 6: 30 PM - Peter and Elizabeth C. Tower Auditorium**

Dr. Peter Reczek will moderate a panel of four scholars that will explore the impact these great books had on all aspects of our growing civilization. The publication of *De Revolutionibus* created a scientific revolution that continues to this day. Copernicus' wide-ranging influence was not solely scientific, but inspired profound changes in culture, philosophy and religion. The panelists are:

**Rance Solomon, *Astronomer*, Department of Physics, University at Buffalo**

Solomon will discuss the scientific aspects of Copernicus' great discovery, its significance to scientists that followed and their view of the structure of the universe.

**Dr. Martin F. Ederer, *Historian***, Department of History and Social Studies Education, SUNY Buffalo State

What was life like in the Europe (and the Poland) of Copernicus? How may have these conditions influenced Copernicus' work and its reception? Ederer will share his insights on an era that ushered in many complicated religious, intellectual and cultural changes.

**Dr. Julie Kirsch, *Philosopher / Theologian***, Department of Philosophy, D'Youville College

Kirsch will talk about the philosophical and religious consequences of the sun-centered view of the universe and how a simple change in perspective had profound effects on the church and science.

**Amy Pickard**, *Rare Book Curator and Librarian*, Buffalo and Erie County Public Library. Pickard will discuss how *De Revolutionibus* and the *Milestones of Science* collection came to be in Buffalo and some of the challenges of collecting and maintaining one of the premier rare book collections in the world.

**Dr. Peter R. Reczek**, *moderator*

Dr. Reczek is a biotechnology entrepreneur and consultant. He received his Ph.D. in Biophysics from the Roswell Park Comprehensive Cancer Center where he worked as a faculty member in the Biophysics Department as well as serving as the founding director of the Technology Transfer Office and the Office for Research Subjects Protection.

***Free with museum admission***

**Day 2 - Friday, February 8, 2019 - Peter and Elizabeth C. Tower Auditorium**

Throughout time, composers have looked to the stars, sun and moon for inspiration, exploring the universe with their music. *A Musical Feast*, {[www.amusicalfeast.com](http://www.amusicalfeast.com)} the chamber music group created by retired Buffalo Philharmonic Orchestra Concertmaster Charles Haupt, *will perform works with astronomical themes*. His wife, Irene Haupt, serves as Executive Director.

**General admission \$20; Burchfield Penney members \$10. For tickets, call 716 876-6011.**

**PRE-CONCERT TALK – 7:30 pm**

Roland Martin and Dr. Peter Reczek will discuss the relationship of early astronomical discoveries to the metaphysics of music and highlight composers who took inspiration from the cosmic vision of Ptolemy, Copernicus, Kepler and Newton.

**PERFORMANCE - 8 PM**

**Surge Virgo** Isabella Leonarda (1620-1704)  
Tiffany DuMouchelle, soprano Roland Martin harpsichord  
The Freudig Singers of Western New York

**Song to the Moon** {Rusalka} Antonin Dvorak (1841-1904)  
Tiffany DuMouchelle, soprano Roland Martin, piano

**nun ist aber der einzelne Ton beziehungslos** ( 2018) Ruth Wiesenfeld  
**the single tone however is unrelated**

Warner Iversen, solo theorbo.

***Commissioned by Paul Simini***

With the publication of De Revolutionibus in 1543, Copernicus completely overturned a view of the structure of the universe that existed for over 1000 years. His heliocentric (sun centered) system set the stage for modern astronomy and can also be credited as the very beginning of modern data-driven science.

But, Copernicus was a theoretical scientist. He gathered very little data of his own but relied heavily on existing star charts and calendar observations in developing his great theory.

About 50 years after Copernicus' death, the great German mathematician and astronomer, Johannes Kepler, using updated scientific equipment, was able to prove Copernicus' structure for the universe and discover his three great laws of planetary motion. These laws set the stage for his observations that became known as the "*Music of the Spheres.*"

For astronomer Johannes Kepler the heavenly motions were, "nothing but a continuous song for several voices perceived not by the ear, but by the intellect," as he noted in book *Harmonia Mundi*. He found that the angular velocities of planets closely correspond to musical intervals. When he compared the extremes for combined pairs of planets, the results yielded the intervals of a complete scale.

Commissioned by Paul Simini to incorporate the ideas of Kepler's outstanding mind into a piece of music I was intrigued by the obsessiveness with which Kepler pursued the force of his vision even in the face of repeated failures and personal tragedies. Thus, rather than his musical theories I will put Kepler's restless quest for the discovery of the divine plan of creation into the focus of my musical work.

The piece will come into being in close collaboration with theorbist Warner Iversen. He will immerse himself in the proportions, relations and vibratory patterns of the single intervals, unearthing their complexities and particularities. His performance will resemble the journey through an acoustic universe full of meaning, strange correspondences and grand harmonies.

#### INTERMISSION

**Unless Acted Upon** (2011) Caroline Mallonee  
Kathrein Allenberg, violin Eric Huebner, piano Jonathan Golove, cello  
Barry Crawford, flute Andrew Seigel, bass clarinet

*Unless Acted Upon* is a sound representation of Newton's First Law of Motion: A body at rest tends to stay at rest unless acted upon by an external, unbalanced force. A body in motion tends to stay in motion unless acted upon by an external, unbalanced force.

This piece explores several ways in which forces can affect a body in motion: friction slows a moving object, gravity makes something fall, pushing makes objects go faster, bouncing objects bounce, and a magnetic force draws objects together. The first section, Newton's Cradle, serves as a prelude. A Newton's Cradle consists of an odd number of spheres; when one ball is pulled backward and released, the ball on the opposite side moves upon impact.

The piece was commissioned by the Walden School for Firebird Ensemble; it has since been played in Carnegie Hall by the Da Capo Chamber Players, by faculty members at the Bennington Chamber Music Conference, by the Guerrilla Composers Guild at the Hot Air Music Festival in San Francisco, and by members of the New York Philharmonic on their CONTACT! New Music Series at National Sawdust.

**Toucher (1973)**

Speaking percussionist Steve Solook

Vinko Globokar (1934)

with projection of text

**The Bird of Dawning (Shakespeare: Hamlet act1, scene 1) Roland Martin**

Tiffany DuMouchelle, soprano Kathrein Allenberg, violin Roland Martin, piano

**Trio Sonata #1 in G Moderato**

Giovanni Battista Pergolesi (1710-1736)

Kathrein Allenberg, violin Shannon Steigerwald, violin Roland Martin, harpsichord  
Jonathan Golove, cello

**About A Musical Feast**

Founded in 2006 by retired Concertmaster of the Buffalo Philharmonic Orchestra Charles Haupt, A Musical Feast fuses contemporary and classical music with poetry and dance, featuring musicians of international stature. Haupt departed the BPO after 37 years of distinguished service. He was also Concertmaster of the Mostly Mozart Festival Orchestra at Lincoln Center in N.Y. City for 21 years, and taught on the faculty of the Eastman School of Music for 12 years.

**About the Burchfield Penney Art Center at SUNY Buffalo State**

Founded in 1966 on the campus of SUNY Buffalo State, the Burchfield Penney Art Center is dedicated to the art and vision of renowned American watercolorist Charles E. Burchfield (1893–1967) and the distinguished artists of Western New York state. In 2008, the Burchfield Penney expanded from its location in Rockwell Hall to a new \$36 million freestanding facility in the heart of Buffalo's Museum District. Designed by Gwathmey Siegel

and Associates Architects, the museum includes more than 84,000 square feet dedicated primarily to galleries, as well as education and program space. It is home to the world's largest collection of artwork and ephemera by Burchfield and a collection of more than 8,000 works by over 850 artists. The Burchfield Penney was the first LEED certified art museum in New York State and was featured by travel editors of the New York Times as one of the "[44 Places to Go in 2009.](#)" For more information go to, [www.burchfieldpenney.org](http://www.burchfieldpenney.org)

# # #