



*Heaven's Carousel
first outdoor crane test in Cologne
winter 2014*

Heaven's Carousel

With a relatively simple setting the *Heaven's Carousel* is beaming the ancient music of the spheres into the modern age of astrophysics which is confronted not with static celestial spheres but with an accelerated expanding universe. For the 4th Hubble Space Telescope Conference which took place in March 2014 at the renowned Accademia dei Lincei in Rome Tim Otto Roth designed for the academy's palm garden an ethereal carousel construction with 36 loudspeakers mounted on strings and turning around the heads of the visitors with a wing span of up to 16 meters. As the sound waves are compressed or expanded when the circulating loudspeakers approach or depart the pitch of the played sine waves changes up or down depending on the relative velocity of the speaker. This so called Doppler Effect depends on the listener's position, so the visitors are invited to move under the installation. There even comes another component into play when not only continuous tones are generated but very short sine pulses are played. Due to the extension of the installation and the runtime of sound these sound packages recombine differently in the space.

This incredible dynamic sculpture created by Tim Otto Roth channels some of these feelings about the accelerating universe. Important themes that are related to that discovery are echoed in the piece: blueshifts and redshifts, isotropy and homogeneity, our inability to see the strings directing the action, the struggle to perceive depth in the universe are just a few ... (Adam Riess)

*www.imagination.net/carousel
TV feature on 3sat: see link on press page*

*suspended carousel framing the moon on the night sky
Accademia dei Lincei, Rome 2014 >
impression from the premiere (double page) >>
picture: Pam Jeffries/ STSci*

