The science of Bach's world revealed by Tafelmusik

J.S. Bach: The Circle of Creation, running May 6 to 12, includes microscopic images of musical instrument components.

It's not often that a scientist gets a thank you on a concert program, but Tafelmusik Baroque Orchestra's newest show owes a lot to microscopist Daniel L. Geiger.

The curator at the Santa Barbara Museum of Natural History provided the stunning microscopic images featured in J.S. Bach: The Circle of Creation, opening Wednesday.

Modern technology was used to unravel the secrets of music-making in the 18th century, an adventure led by project creator Alison Mackay, who plays double bass in the orchestra. The result is photographs of the components of instruments that can't be seen by the naked eye.

Mackay, who has created two previous Tafelmusik multimedia productions (TheGalileo Project, about outer space and planets, and House of Dreams, about the visual art that influenced composers) asked herself, "What does it take for a composer like Bach to create, from the moment of inspiration in his study to the first notes of a performance?"

She began with the watermarked paper made 100 kilometres away at a Czech family business, the ink Bach mixed himself and the goat gut used to make a cello string.

The project draws on the work of modern instrument-makers who use technology recovered from the 18th century.

The production also includes images and video from Leipzig, Germany, where Bach lived and where Tafelmusik spent two weeks during last year's Bach Festival.

Bach (1685 to 1750) lived in Leipzig during the last 27 years of his life, at a time when one in 10 citizens was an artisan, Mackay says.

When the introduction of street lighting made it safe for the middle class to venture out at night, Bach and his fellow musicians played regularly in the Zimmerman coffee house, a scene that will be reproduced in the Tafelmusik performance.

Photos, video and Bach's music — including the Brandenburg Concerto No. 3 in G major and Cantata No. 208 (Sheep May Safely Graze) — will combine with narration by actor Richard Greenblatt, stage direction by Marshall Pynkoski and production design by Glenn Davidson.

The program runs May 6 to 10 at Trinity-St. Paul's Centre, with a May 12 show at the George Weston Recital Hall at the Toronto Centre for the Arts. Go to tafelmusik.org for information.