International Conference on New Interfaces for Musical Expression

Rossby Waving for Violin, MUGIC[®] sensor, and video

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PROJECT DESCRIPTION

Expanding Expression with MUGIC®

After collaborating with the [Sound Music Movement Interaction Team at IRCAM](#) in Paris using IRCAM's "MO" (Modular Musical Objects) sensor, I created my own motion sensor system for performance prototype called "MUGIC®" in 2015.

Starting in 2017, we developed a new MUGIC® prototype. In September 2020, I commercialized MUGIC®, with officially registered trademark. During the current Covid crises, university professors, students and artists outside our university are using MUGIC® to developing collaborative and creative projects using their instruments and hands. Our PhD students use MUGIC® in their thesis, performance and compositions through graduate seminars "Composing with Sensors", creating projects. Our current multidisciplinary, multi-location projects using MUGIC® include the collaboration between the faculty and students at UCI, University of Toronto, and the Pratt Institute of New York.

PROGRAM NOTES

The title was taken from "Rossby Wave", a natural atmospheric phenomenon relating to rotation of the planet. When the Rossby Wave 'breaks', it could cause extreme climate conditions as El Niño/La Niña. The piece consists of a 'flexible ostinato', a somewhat regular 'wave' of violin sound that's processed and flows. The motion sensor **MUGIC®** detects and interprets the character of the bowing movements which affect 'ostinato' in its timbre and character. Some irregular and disruptive motive starts to affect the regular ostinato, sometimes mangling it. Eventually both the violin and ostinato flows freely, sometimes and sometimes not, affecting each other. The accompanying video was created by media artist [Liubo Borissov](#), using Artmatic Voyager and Max (Jitter). **Rossby Waving** is dedicated to the memory of Jean-Claude Risset who passed away in November, 2016.

MUGIC® (Music/User Gesture Interface Control) is a small, versatile and affordable prototype motion sensor that enables you to use your movements to control virtually anything in software. MUGIC® has been used by musicians, dancers, artists, actors and in universities around the world. The current prototype of **MUGIC®** designed between 2018-2020 is finally available for purchase. <https://mugicmotion.com/>

MEDIA

Rossby Waving (2017)

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