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**Mariana Montiel\*** (mmontiel@gsu.edu), 30 Pryor St. Suite 750, Atlanta, GA 30303, and **Robin Baidya** and **Rodrigo Castro Lopez Vaal** (mmontiel@gsu.edu), Atlanta, GA 30312, and **Emiliano Nieto-Montiel**. *Mathematical Music Theory/Post-Tonal Analysis: A Pilot in Course Pairing*. Preliminary report.

The present work reports on the implementation of a pilot course pairing experiment, result of a competitive award process, in which the Mathematics Department and the School of Music participated with their courses “Mathematical Music Theory” and “Post-tonal Analysis” respectively. The motivation is that music presents a rich and varied subject for the application and development of certain mathematical subjects, some of which are not always part of the standard curriculum. Post-tonal music has been a fertile area for the creation of compositional and analytical techniques that draw on mathematics. We will convey how this subject can expose mathematics students to tools and techniques that are not always covered in the core courses of the major. The music students, in turn, can see the formal aspects behind the study of post-tonal analysis, or the analysis of rhythm, which are usually not covered in the courses of their concentration. As an example three final projects are presented by three graduate students, two in mathematics and one in music, in which post-tonal works were created and analyzed using mathematical techniques and language. (Received December 28, 2015)