

1116-J1-2662      **Marina Dedlovskaya, Malgorzata Aneta Marciniak\*** (mmarciniak@lagcc.cuny.edu),  
**Marina Nechayeva and Vladimir Przhebelskiy.** *Mathematics in Flight.*

A series of aerodynamics-centered research projects, starting with pre-calculus and culminating with multivariable calculus, provides instructors with an opportunity to effectively incorporate research-based learning into post-algebra STEM curriculum. Using the common context throughout the entire sequence augments the benefits students gain from applying college mathematics to the real world by allowing a deeper and more meaningful association with the area of research, increasing engagement, retention of the material and strengthening inquiry and problem solving skills. Gradual, systematic immersion in the subject allows students to develop necessary technological and collaboration skills. During this presentation we will showcase research into topics of aerodynamics performed by Undergraduate Summer Research student in collaboration with faculty members representing engineering and mathematics. (Received September 22, 2015)