

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Ana-Maria Castravet

**Laboratoire de Mathématiques de
Versailles**

Date: Thursday, April 29, 2021

Time: 3:00 PM

Location: Zoom

Zoom URL: [notredame.zoom.us/j/97739336655?
pwd=QmUxd3V2Rndyd0VFNlc0RFBxK0xPQT09](https://notredame.zoom.us/j/97739336655?pwd=QmUxd3V2Rndyd0VFNlc0RFBxK0xPQT09)



Lecture Title:

Blown-up toric surfaces with non-polyhedral effective cone

Abstract

I will discuss recent joint work with Antonio Laface, Jenia Tevelev and Luca Ugaglia, in which we construct examples of projective toric surfaces whose blow-up at a general point has a non-polyhedral (i.e., not finitely generated) cone of effective divisors, both in characteristic 0 and in prime characteristic. As a consequence, the Grothendieck--Knudsen moduli space of stable rational curves with $n \geq 10$ markings has a non polyhedral cone of effective divisors and, in particular, it is not a Mori Dream Space.