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DOKUZ EYLÜL UNIVERSITY FACULTY OF SCIENCE  
DEPARTMENT OF MATHEMATICS  
**SEMINAR**

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## Linear Tropicalizations

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### ABSTRACT

Tropical geometry and Berkovich spaces have been used to tackle many problems in classical algebraic geometry. The relation between them has important applications in both fields. In this talk I will give gentle introductions to both concepts. I will also give some details about higher dimensional tropical geometry and show a natural relation between tropicalizations of a variety and analytification of it in the sense of Berkovich. Then I will introduce linear tropicalizations that gives a similar relation and has additional properties. I will talk about some applications of it to complex line arrangements and give a solution to transverse intersection problem in tropical geometry. This is a joint work with Özgür Kışisel.

DATE & TIME: 04 December 2015, Friday at 13:30

SEMINAR ROOM: B206

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