NOTETAKER CHECKLIST FORM

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Lecture’s Name: Ilia Itenberg

Talk Title: Real Aspects of Tropical Geometry I

Date: 8 / 24 / 2009 Time: 9:15 am (circle one)

Check List
(This is NOT optional, we will not pay for incomplete forms):

Introduce yourself to the lecturer prior to lecture. Tell them that you will be the notetaker, and that you will need to make copies of their own notes and materials, if any.

Obtain ALL presentation materials from lecturer. This can be done either before the lecture is to begin or after the lecture; please make arrangements with the lecturer as to when you can do this. Either e-mail this to notes@msri.org or obtain a USB stick from the computing department room 214.

- **Computer Presentations**: Obtain a copy of their presentation
- **Overhead**: Obtain a copy or use the originals and scan them
- **Blackboard**: Take blackboard notes in black or blue PEN, we will NOT accept notes in pencil or in colored ink other than blue or black.
- **Handouts**: Obtain a copy and scan them

Scanning can be done in Computer Lab Room 205. All materials must be scanned as described above and sent to notes@msri.org The subject line should contain the Lecturer’s name and date of talk.

Please have either the lecturer/yourself fill in the following when lecture is done:

1. List 6-12 lecture keywords: tropical geometry, real algebraic geometry, patchworking, combinatorial patchworking, Viro, Viro polynomial, Harnack, Harnack curves
2. Please summarize the lecture in 5 or fewer sentences.

In this talk, the lecturer begins a three-talk minicourse on tropical geometry with applications to real algebraic geometry. The focus of today’s lecture is primarily on combinatorial patchworking, a particular case of a construction of Viro in the 1990’s regarding real algebraic varieties with controlled topology. Given a sufficiently “nice” triangulation of the length d complex in R2, the lecturer shows how to construct a piecewise linear curve and proves that there is an algebraic non-singular curve with the same directed topology. This has applications to constructing so-called “Harnack” curves in R2.

Return all materials to the Computing Department in Room 214

Questions can be directed to anyone in the Computing Department in Room 214