NOTETAKER CHECKLIST FORM

Name: Sheel Ganatra E-mail/Phone: ganatra@math.mit.edu / 302.345.1541

Lecture’s Name: Ilia Itenberg

Talk Title: Real Aspects of Tropical Geometry II

Date: 8/25/2009 Time: 9:30 AM pm (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: Newton polygon, tropical curve, tropical variety,
   Newton polytope, Viro polynomial, combinatorial patchworking, amoeba

2. Please summarize the lecture in 5 or fewer sentences.

In this second lecture, the speaker discusses generalizations of combinatorial patchworking, including to higher dimension, and to arbitrary Newton polygons. Tropical curves and the tropical scanning are then introduced, which can be seen as a limit of real operations via Newton polygon techniques. Tropical curves are shown to be naturally dual to certain degenerations of the Newton polygon, and can be viewed as non-commutative smoothings. The lecture ends with a brief mention of how patchworking appears in the dual setting of a tropical curve.

Return all materials to the Computing Department in Room 214.

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