

Submittee: Dev Sinha

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Title: West Coast Algebraic Topology Summer School

Event Type: Summer-School

Location:

Stanford University

Dates:

July 16-21, 2012

Topic:

Algebraic K-theory

Methodology:

Participants (mostly graduate students and early career) prepared and gave lectures which were outlined by scientific organizers. Only 3 hours of lecture per day, with other time allotted for discussion, reading, doing exercises, etc. - that is, to encourage deeper understanding.

Objectives Achieved:

Participants obtained a solid introduction to this area, proceeding through topics which eventually came to the research frontier.

Scientific Highlights:

Many collaborations between young mathematicians were started.

Organizers:

Adem, Alejandro, Math, PIMS and UBC // Blumberg, Andrew, Math, U Texas // Cohen, Ralph, Math, Stanford // Dundas, Bjorn, Math, U Bergen // Dwyer, Bill, Math, Notre Dame U // Gerhardt, Teena, Math, Michigan State U // Klein, John, Math, Wayne State U // Mandell, Mike, Math, U Indiana // Sinha, Dev, Math, U Oregon

Speakers:

Introduction. - Teena Gerhardt, Michigan State. // The construction of Algebraic K-theory. - Mona Merling, U Chicago. // Fundamental theorems. - Carolyn Yarnall, U Virginia. // The approximation theorem, the sphere theorem, and the plus construction. - Aaron Royer, U Texas. // The K-theory of algebraically closed fields and finite fields. - Peter Arndt, U Regensburg. // THH, TC and the Cyclotomic Trace. - Anna Marie Bohmann, Northwestern U. // Computations in THH and TC. -

Sean Tilson, Wayne State U. // The DeRham-Witt complex. - John Lind, Johns Hopkins U. // On the K-theory of local fields. - Ryo Kato, Nagoya U. // The algebraic K-theory of topological K-theory and the chromatic tower for the algebraic K-theory of a point. - Kyle Ormsby, MIT. // Lower K-theory of manifolds. - Robin Koytcheff, Brown U. // Psuedoisotopies and K2. - Inna Zakharevich, Harvard U. // Waldhausen's work. - Cary Malkiewich, Stanford U. // Outline of the proof of Waldhausen's splitting theorem. - Phillip Hackney, UC Riverside. // Higher Riemann-Roch theory, higher Reidemeister torsion. - Dan Ramras, New Mexico State U.

Links:

<http://noether.uoregon.edu/~dps/wcatss2012/index.php>
