

Schedule  
 Commutative Algebra: Connections with Algebraic Topology and Representation Theory  
 Sunday, May 18–Thursday, May 22  
 115 Avery Hall

Opening Remarks: John Meakin, Chair, Department of Mathematics; David Manderscheid, Dean, College of Arts & Science;  
 Prem Paul, Vice Chancellor, Office of Research

|          | Sunday   | Monday   | Tuesday   | Wednesday   | Thursday   |
|----------|--|--|---|---|--|
| 8:00 am  |  |  |   |   |  |
| 8:15 am  |  |  |   |   |  |
| 8:30 am  |  |  |   |   |  |
| 8:45 am  |  |  |   |   |  |
| 9:00 am  | Opening Remarks  |  |   |   |  |
| 9:15 am  | <b>Ragnar-Olaf Buchweitz</b><br>On the endomorphism ring of the syzygies in the tautological Koszul complex. | <b>Steve Halperin</b><br>An asymptotic formula for the ranks of the homotopy groups of a 1-connected finite complex, and for the deviations of a local ring. | <b>David Eisenbud</b><br>Cones of Betti Tables and Cohomology Tables.               | <b>Dave Benson</b><br>Squeezed resolutions and the loop space on BG p-completed.                                      | <b>Jürgen Herzog</b><br>Vertex Cover Algebras.           |
| 9:30 am  |  |  |   |   |  |
| 9:45 am  |  |  |   |   |  |
| 10:00 am | Break  | Break  | Break   | Break   | Break  |
| 10:15 am |  |  |   |   |  |
| 10:30 am | <b>Kiriko Kato</b><br>Recollement of homotopy categories and Cohen-Macaulay modules.                         | <b>Alex Berglund</b><br>Minimal Koszul models in local algebra and rational homotopy theory.   | <b>Henrik Holm</b><br>Vanishing of cohomology over AC rings.                        | <b>John Greenlees</b><br>Homotopy invariant notions of complete intersections for commutative rings and ring spectra. | <b>Idun Reiten</b><br>Cluster tilting and hypersurfaces. |
| 10:45 am |  |  |   |   |  |
| 11:00 am | <b>Sean Sather-Wagstaff</b><br>Counting semidualizing complexes.   | <b>Greg Piepmeyer</b><br>TBA   | <b>Janet Striuli</b><br>Degree of generalized Hilbert Polynomials and applications. |   |  |
| 11:15 am |  |  |   |   |  |
| 11:30 am | Break  | Break  | Break   | Break   | Break  |
| 11:45 am |  |  |   |   |  |
| 12:00 pm | <b>Winfried Bruns</b><br>Koszul homology and the $N_p$ property of Veronese subrings.                        | <b>Clarence Wilkerson</b><br>The rational homotopy of toric varieties.   | <b>Irena Peeva</b><br>Hilbert schemes over Clements-Lindstrom rings.                | <b>Brooke Shipley</b><br>A curious example of two model categories and some associated differential graded algebras.  | <b>Mel Hochster</b><br>Tight closure and localization.   |
| 12:15 pm |  |  |   |   |  |
| 12:30 pm |  |  |   |   |  |
| 12:45 pm | Lunch  | Lunch  | Lunch   | Lunch   |  |
| 1:00 pm  |  |  |   |   |  |
| 1:15 pm  |  |  |   |   |  |
| 1:30 pm  |  |  |   |   |  |
| 1:45 pm  |  |  |   |   |  |
| 2:00 pm  |  |  |   |   |  |
| 2:15 pm  |  |  |   |   |  |
| 2:30 pm  |  |  |   |   |  |
| 2:45 pm  | <b>Henning Krause</b><br>Localizing subcategories of the stable module category of a finite group.           | <b>Jan-Erik Roos</b><br>Homological properties of the cohomology ring of the fundamental group of 3-manifolds.   | <b>Joseph Lipman</b><br>Hochschild homology and Grothendieck Duality.               | <b>Paul Roberts</b><br>Almost Cohen-Macaulay Algebras.  |  |
| 3:00 pm  |  |  |   |   |  |
| 3:15 pm  |  |  |   |   |  |
| 3:30 pm  |  |  |   |   |  |
| 3:45 pm  | Break  | Break  | Break   | Break   |  |
| 4:00 pm  |  |  |   |   |  |
| 4:15 pm  | <b>Müfit Sezer</b><br>Separating Invariants.   | <b>Tony Puthenpurakal</b><br>Asymptotic stabilization of prime divisors of certain extension modules.  | <b>Izuru Mori</b><br>Symmetry and asymmetry of the Euler form.                      | <b>Petter Andreas Bergh</b><br>Quantum complete intersections.  |  |
| 4:30 pm  |  |  |   |   |  |
| 4:45 pm  | Break  | Break  | Break   | <b>Claudia Miller</b><br>On the Frobenius endomorphism.   |  |
| 5:00 pm  | <b>Jon Carlson</b><br>Finite generation of Tate cohomology.  | <b>Bernd Ulrich</b><br>Blowup algebras and fibers of morphisms.  | <b>Kathryn Hess</b><br>Power maps on the Hochschild complex of a twisting cochain.  | Break   |  |
| 5:15 pm  |  |  |   | <b>Craig Huneke</b><br>Comparing powers and symbolic powers of ideals.  |  |
| 5:30 pm  |  |  |   |   |  |
| 5:45 pm  |  |  |   |   |  |
| 6:00 pm  |  |  |   |   |  |
| 6:15 pm  |  |  |   |   |  |
| 6:30 pm  |  |  |   |   |  |
| 6:45 pm  |  |  |   |   |  |
| 7:00 pm  |  |  |   |   |  |

|                 | What                               | When     | Where           |                                    |
|-----------------|------------------------------------|----------|-----------------|------------------------------------|
| Special Events: | Indian Classical Music Performance | Sunday   | 7:30-9:00 p.m.  | Mabel Lee Hall (3rd Floor)         |
|                 | Reception                          | Saturday | 7:30-10:30 p.m. | 2400 Sheridan (Wiegands' Home)     |
|                 | Dinner Party                       | Monday   | 7:30-10:30 p.m. | 6712 Old Dominion (Avramovs' Home) |
|                 | Banquet                            | Tuesday  | 7:00-11 p.m.    | Wick Alumni Center                 |