## PMAT 505 W 2010 TALKS

Talks will be Wednesdays at 09:00.

- 1. Construction and properties of  $\mathbb{R}$  Justin September 29
- 2. The Fundamental Theorem of Algebra
- 3. The quaternions
- 4. Cayley-Dickson Algebras
- 5. Trichotomy for cardinal numbers
- 6. Zermelo's theorem on well-ordering
- 7. Compactly generated spaces
- 8. Simplicial complexes
- 9. Zariski topology Tristan, November 3
- 10. Order topologies are normal
- 11. Paracompactness
- 12. Stone-Weierstrass theorem
- 13. Planar graphs are 5-colourable