

Research Timeline

The completed goals and proposed timeline for this project are as follows:

Completed goals

- Complete induction
- Studied classical bundle theory
- Submitted core component research proposal
- Studied Dupont's monograph and start introductory reading on equivariant de Rham theory
- Covered introductory material to equivariant cohomology
- Written several reports on texts I have read
- Completed all coursework
- Attended seminars regularly including:
 - Differential geometry seminars
 - Complex geometric analysis seminars
 - Postgraduate seminars
 - School colloquiums

2015 — 2016

January 2015 — March 2015

- Major review seminar (February 2015)
- Write skeleton document of thesis (March 2015)
- Continue study of equivariant de Rham theory (February – April 2015)
- Continue attending seminars regularly including:
 - Differential geometry seminars
 - Postgraduate seminars
 - School colloquiums
- Thesis writing (Present – December 2015)
 - Background Chapters (March – April 2015)
- In depth study of Bott's paper '*On the Chern-Weil homomorphism and the continuous cohomology of lie groups*' (March – June 2015)

April 2015 — June 2015

- Begin working on main goal of project – to prove an isomorphism between the extension of Dupont’s simplicial model and the Cartan model for equivariant cohomology (April – July 2015)
- Thesis writing (Present – December 2015)
 - Extension of Dupont’s work (April – August 2015)
- In depth study of Bott’s paper ‘*On the Chern-Weil homomorphism and the continuous cohomology of lie groups*’ (March – June 2015)
- Postgraduate Seminar (May 2015)
- Continue attending seminars regularly including:
 - Differential geometry seminars
 - Postgraduate seminars
 - School colloquiums

July 2015 — September 2015

- Finish working on main goal of project – to prove an isomorphism between the extension of Dupont’s simplicial model and the Cartan model for equivariant cohomology (April – July 2015)
- Aim to have most draft sections completed of major sections of thesis (August 2015)
- Collate the complete bibliography for thesis (August 2015)
- Start preparing first draft of thesis (August 2015)
- Complete all research (September 2015)
- Continue attending seminars regularly including:
 - Differential geometry seminars
 - Postgraduate seminars
 - School colloquiums

October 2015 — December 2015

- Complete first draft of thesis (October 2015)
- Have thesis ready for submission (December 2015)