

## Research Activity Schedule

Milestone	Description of activities	Anticipated starting date	Anticipated completion date
Engineering run	First use of detectors and spectrometer in muon beam, to test entire apparatus	2001/11	2001/12
Solenoid field mapping	First detailed study of solenoid field in the tracking volume, using Hall and NMR probes	2002/3	2002/5
Initial data	Begin studies of systematics of measurements of Michel parameters, controlling conditions of data taking	2002/6	2002/8
TEC design studies	Determine optimum design characteristics of low mass chamber in the muon beam, just before the entrance to the spectrometer solenoid	2002/6	2003/3
Initial physics measurements	Collect data including detailed systematic studies to measure $\rho$ and $\delta$ at precisions of $10^{-3}$ Evaluate systematic effects to precision of better than $10^{-3}$ , and derive first physics results	2002/10 2002/10	2002/12 2003/6
Construction of TEC	Will allow accurate determination of muon beam characteristics to control systematics of polarization measurements	2003/2	2003/7
Solenoid field mapping	Field distribution in tracking and beam entrance regions, using Hall and NMR probes	2003/1	2003/3
Initial depolarization studies	Continue systematic studies and collect data to measure $P_\mu \xi$ at a precision of $10^{-3}$	2003/7	2004/3
Muon beam and target upgrades	Assess limitations of M13 beam line and muon production target. Improve control of systematic effects.	2003/7	2004/12
Increase precision	Continue systematic studies and collect data to measure to the limits of the apparatus	2003/9	2005/6
Analysis (2)	Evaluate depolarization effects and derive first result on $P_\mu \xi$	2003/12	2004/6
Final results	Complete full analysis, publish results	2005/6	2007

Table 1: Research activity schedule for the  $\mathcal{TWIST}$  project.