Proposal Title (exactly as it appears on submission): The Detailed Physical Structure of the Circumgalactic Medium

Year 1			
Milestone	**Details**	**Dates**	**Status (renewals only)**
RM.A Develop "fiducial" turbulent CGM model and run resolution study, including first petascale simulation of the CGM.	**Resources:** Titan **Node hours:** 0.5 M **Filesystem storage (TB and dates):** insert text, 01/19 - 03/19 **Archival storage (TB and dates):** 03/19 - 03/20 **Software Application:** Cholla **Tasks:** insert text **Dependencies:** N/A	01/19 - 03/19	N/A
RM.B Run suite of moderate resolution turbulent box simulations to explore relevant parameter space.	**Resources:** Titan **Node hours:** 0.7M **Filesystem storage (TB and dates):** insert text, 04/19 - 06/19 **Archival storage (TB and dates):** 06/19 - 06/20 **Software Application:** Cholla **Tasks: Dependencies:** N/A	04/19 - 06/19	N/A
RM.C Run additional extreme resolution models (as informed by parameter study) to produce a state-of-the-art suite of numerical simulations.	**Resources:** Titan **Node hours:** 1.5M **Filesystem storage (TB and dates):** insert text, 07/19 - 09/19 **Archival storage (TB and dates):** insert text, 09/19 - 09/20 **Software Application:** Cholla **Tasks: Dependencies:** RM.A, RM.B	07/19 - 09/19	N/A