



Disentangling the Components of the Milky Way

Inferring the Phase-Space Structure of the Milky Way Using
Gaussian Mixture Modelling with Extreme Deconvolution

A REPORT PRESENTED

BY

RAUNAQ RAI

Departments

Department of Physics (Cavendish Laboratory)
Institute of Astronomy

Degree

MPhil in Data Intensive Science

Supervision

Dr Anke Arentsen



St Edmund's College
University of Cambridge

29TH JUNE 2025