



UNIVERSITY OF
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Tomographic Reconstruction Assessed Coursework
The Central Slice Theorem

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1 Introduction

2 Tomographic Reconstruction

Tomographic reconstruction involves the creation of an image of an object taken through a particular slice by recombining the data collected from a set of line integrals across that object in the plane of interest. The word tomography comes from the Greek *tomos* meaning section and *graphein* meaning to write, so tomography is simply writing ‘parts’ of an object, in this case an image of a single plane through that object.