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Data processing for small angle neutron scattering analysis of archaeological samples.

This internship joins an archaeological project the objective of which is to demonstrate that small angle neutron scattering can be used to analyse pottery sherds.

The aim is to recognise their forming technique by a quantitative analysis using a non-destructive method. The pieces are probed in depth to study the scattering objects inside the clay by observing the way they scatter neutrons.

This work will first concentrate on establishing some useful theoretical properties of the experiment. Next, the focus will be set on devising a way to obtain useful parameters from the experimental data.

The goal is to specialise the data processing procedure to the experiment and then design a software tool contributing to this project by accelerating the processing part.