A discriminative feature selection approach for shape analysis: application to fetal brain cortical folding

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Highlights

- We propose a novel method for cortical folding analysis of the fetal brain.
- Most discriminative cortical points are selected by a feature selection algorithm on time-varying deformation fields.
- The method is validated on two synthetical datasets with linear and non-linear dynamics through time.
- The method is applied on an heterogeneous fetal brain population with different ages, in order to study the cortical folding patterns.