



q τ Diffusion MRI (q τ -dMRI) uses a functional basis to effectively represent the four-dimensional dMRI signal over:

- Gradient Strength
- Gradient Direction
- Diffusion Time

In *in-vivo* test-retest studies we find that q τ -dMRI can reliably estimate **diffusion time-dependent q-space indices**, (q τ -indices) providing novel microstructural interpretation to these measures.

Functional Basis \rightarrow **Time-Dependent Q-space Indices**

