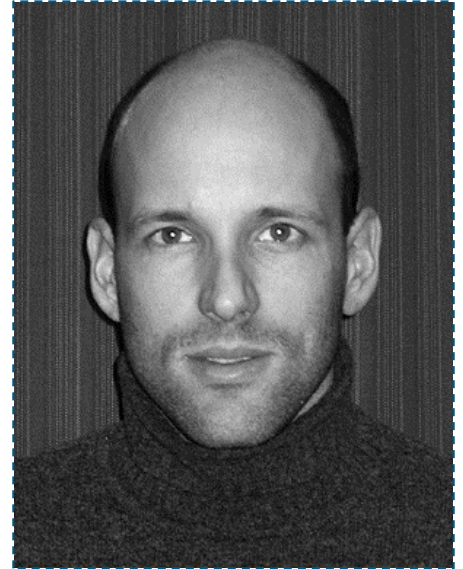


## *Algorithms for deformable image registration*

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### **Abstract:**

Image registration is crucial for post-processing of image time series. Without motion correction the analysis and results easily get corrupted by breathing artifacts and other type of motion. There exists a variety of methods for deformable image registration. I will discuss the mathematical and physical background for image registration within the theory of linear elasticity, challenges related to the image registration problem, as well as numerical solutions. Finally, I will show results of image registration algorithms applied to DCE-MRI image time series.

