

CONTENTS

1	Introduction	4
2	Medical images	4
3	Registration of medical images	5
3.1	Classification of registration methods.....	5
3.2	Optimal linear registration.....	5
3.3	Deformable registration.....	6
4	Image registration in computational neuroanatomy	10
4.1	Morphometry methods	10
4.2	Brain atlases	11
5	Objectives of the thesis	11
6	Multimodal deformable registration in stereotaxic space	12
6.1	Low-dimensional deformable registration by enhanced block matching.....	12
6.2	High-dimensional deformable registration with the use of point similarity measures.....	15
6.3	Joint PDF estimation in stereotaxic space.....	19
6.4	Evaluation of deformable registration methods.....	21
7	Deformation-based morphometry on schizophrenia subjects	23
8	Conclusion	26
	References	27
	Curriculum Vitae	31
	Abstract	32