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## Automated planning approaches for non-invasive cardiac valve replacement procedures from CT angiography

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# **Automated Planning Approaches for Non-invasive Cardiac Valve Replacement Procedures from CT Angiography**

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Cover: Pictures from left to right, from top to bottom are all results obtained automatically by the methods in this thesis (1) segmentation of aortic root into LVOT (2) thoracic aorta quantification (3) aortic valve with segmented 2D contour (4) segmentation of aortic valve calcium (5) 3D segmentation from femoral arteries to aorta (6) aorta dilation quantification.

Cover by Xinpei Gao, layout by Hendrik Freling.

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