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Computer-aided detection of wall motion abnormalities in cardiac MRI

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1. Adding knowledge about circumferential myocardial motion (torsion) will solve the aperture problem in a more reasonable way than the normal flow motion, increasing the accuracy of tracking cardiac motion. [Chapter 2 of this thesis]
2. ICA extracts local shape variations, which enables the identification of a measure for regional abnormality of wall motion. [Chapter 3 of this thesis]
3. The statistical independence of ICA allows propagation of probability density functions from the model domain to the shape domain. This enables direct quantification of local shape abnormality from point coordinates on a patient shape. [Chapter 4 of this thesis]
4. Projection onto a statistical shape model of two different shapes from the same subject taken from two time points or different conditions will produce similar shape coefficients. [Chapter 6 of this thesis]
5. Assessment of LV functional improvement from rest to stress can be assisted by using a normokinetic cardiac model as a reference. [Chapter 7 of this thesis]
6. A proper validation for a CAD method should not directly compare the CAD output to a clinical assessment, but should quantify the effect of the CAD method on reproducibility of clinical assessments with and without CAD support.
7. Probability addresses the most important questions of life for which complete knowledge is problematical. [Laplace]
8. Without proving clinical efficacy, a good medical image processing method is a job half-done.
9. For computer-assisted regional wall motion analysis, discriminating a patient from normal is a toy problem, because the subject is already regarded as a patient upon entering a hospital.
10. Apparently, the problem of classifying *allochtonen* and *autochtonen* is not a toy problem.
11. Nowadays, even novel scientific research starts with googling.
12. Zen says, "Before you criticize someone, you have to walk a mile in their shoes". That way, when you criticize them, you are already a mile away and you have their shoes. [unknown source]