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Spatio-temporal integration properties of the human visual system

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Propositions

- 1. Spatio-temporal integration is a dynamic process involved in one's perception, cognition, and physiological state. (this thesis)
- 2. The properties of spatio-temporal integration, when quantified by means of eye movements, constitute a powerful tool to measure different aspects of the visual system. (this thesis)
- 3. The spatio-temporal integration of oculomotor tracking errors can be used to measure retinal sensitivity at different locations of the visual field. (Chapter 4)
- 4. The saccadic main sequence is often not enough to detect subtle oculomotor alterations and needs to be integrated with saccadic spatiotemporal and statistical properties to achieve the best results. (Chapter 6)
- 5. In the oculomotor system, velocity is king. (Chapter 5)
- 6. Attention is the weapon of mass *description* of the cognitive neurosciences. (Chapter 7)
- 7. Dichotomies in science can indicate the presence of a third, conciliatory, perspective. (Chapter 7)
- 8. Moving beyond discrete trial-based psychophysics towards continuous psychophysics can provide both a pragmatic benefit in data collection and a more rigorous ecological validity of experimental paradigms. (this thesis)
- 9. When we see is as important as what and how we see. (this thesis)