

# Some aspects of the geometry of surfaces in $\mathbb{R}^4$

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In this talk I will give a brief review of the local second order geometry of surfaces in  $\mathbb{R}^4$  and then follow R. Thom's approach to consider their local higher order geometry. The principal focus will be on projections of surfaces to 3-spaces. The image of a surface by a given projection can be singular. It turns out that one can recover some aspect of the geometry of the surface from the geometry of its singular projection.

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