

Non-mandatory problem 4

DIFFERENTIAL GEOMETRY UAM 2015-2016

Deadline: November 12th

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Compute the induced metric (by the usual  $\mathbb{R}^{n+1}$  metric) on the sphere  $S^n$  when we use the coordinate chart  $(S^n - \{N\}, p_N)$  where  $p_N$  the stereographic projection from the north pole  $N$ .

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