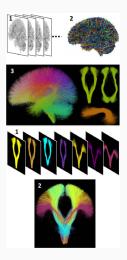
# Fibers Bundles Registration and Anatomical Consistency

Pierre Roussillon

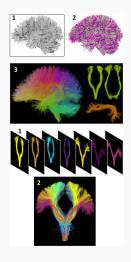
January 7, 2019

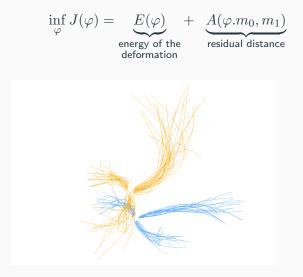
Télécom ParisTech

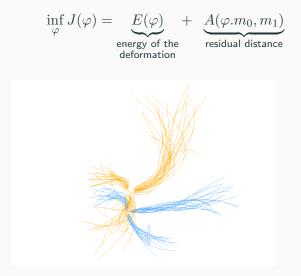
# Motivation

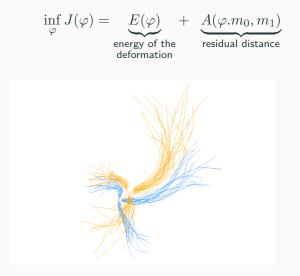


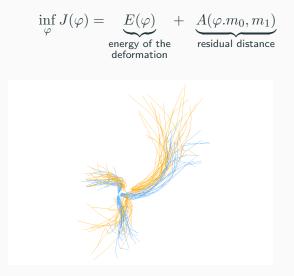


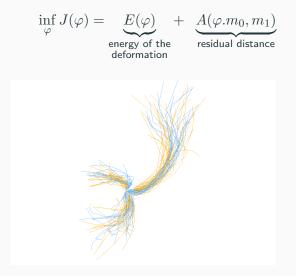












# Defining A (data-attachment term on fibers)

$$\langle q, q' \rangle = \sum_{i=1}^{n} \sum_{j=1}^{m} k_p(c_i, d_j) \langle f_j, g_j \rangle$$
  
 $||q - q'||^2 = ||q||^2 + ||q'||^2 - 2 \langle q, q' \rangle$ 

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 $||q - q'||^2 = ||q||^2 + ||q'||^2 - 2 \langle q, q' \rangle$ 

• No correspondance between points and between fibers

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 $|q - q'||^2 = ||q||^2 + ||q'||^2 - 2 \langle q, q' \rangle$ 

- No correspondance between points and between fibers
- Do we want to consider a fiber orthogonal to all fibers ?