

## OPTIMIZATION AND MAJORIZATION OF $\times 2$ -INVARIANT MEASURES (2 LECTURES)

OLIVER JENKINSON (QUEEN MARY)

I will describe a partial order on the set of  $\times 2$ -invariant probability measures which describes relative dispersion. The order is variously known as “majorization”, “dilation”, or “balayage”. Our main result is the identification of the minimal elements for this order (the “least spread out” invariant measures). This result can be interpreted in terms of ergodic optimization: it identifies the  $f$ -minimizing measures for convex functions  $f$ .