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ABSTRACT BOOK

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**FT08** Laura Iacolina

## Hybridization among wild boars, local breeds and commercial breeds - preliminary results

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*Sus scrofa* is one of the most widespread mammal species and it is heavily managed throughout its range in both its domestic and wild form. The wild boar is one of the most relevant game species in Europe but it is also considered a pest as it can produce economically important crop damages. Hybridization with the domestic pig is known to occur in Europe, however the degree and extent of the phenomenon is not fully understood yet. Introgression is considered to be a threat to biodiversity and could lead to loss of local adaptation or introgression in the wild population of human selected genes. A better understanding of the hybridization levels at European scale would provide an important tool for the development of management plans aimed at reducing human conflict but also at preserving biodiversity and genetic differentiation. Additionally, this information would provide new perspectives on infection routes for pig diseases and zoonoses. Here we report the first results of an ongoing study using genome wide SNPs data. Concordantly with previous studies we found variable levels of introgression from non-detectable to quite high according to sampling location. Interestingly, we also observed gradients in variability levels among the analysed wild and domestic populations. This preliminary results will be further investigated to address the possible presence of hybrid zone(s) in Europe and the possible implications for conservation and management of both wild populations and local pig breeds, as well as the development of contingency plans for infectious pig diseases.