

Session 64: Examining the identifiability of an avian influenza model

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Avian influenza is an infectious disease that impacts both wild and domestic birds across the world. The transmission of avian influenza between humans is extremely rare, and it mostly affects people who are in close contact with infected birds. Although this scenario is uncommon, there have been multiple outbreaks that occur in small infection clusters with relatively low transmissibility and thus are too weak to cause a major outbreak. Still, studying subcritical transmission events is vital for determining whether avian influenza is close to reaching the threshold of the basic reproduction number being greater than one. In this talk, we will discuss the structural and practical identifiability of an avian influenza model. Furthermore, we will explore how identifiability influences key epidemiological measures such as the basic reproduction number.

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