

# HOW DO PREDATOR/PREY INTERACTIONS IMPACT THE TRANSMISSION DYNAMICS OF *ECHINOCOCCUS MULTILOCULARIS* ?

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The parasite *Echinococcus multilocularis* (Em), mostly present in north emisphere, is a trophically transmitted parasite whose existence requires an underlying predator/prey system : predators (canids) are definitive hosts and preys (small mammals) are intermediate hosts. In this talk, we present an ODE model of the transmission of the parasite Em taking into account these trophic interactions. This model allows us to study the impact of the nature of the trophic links as well as of the biodiversity of the intermediate hosts on the parasite dynamics.

## References

- [1] V. Baudrot, A. Perasso, C. Fritsh, P. Giraudoux, F. Raoul. (2016). *The adaptation of generalist predators diet in a multi-prey context : insights from new functional responses*, Ecology, 97(7), 1832-1841.
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