

# The Evolutionary Vaccination Dilemma in Complex Networks

Alessio Cardillo

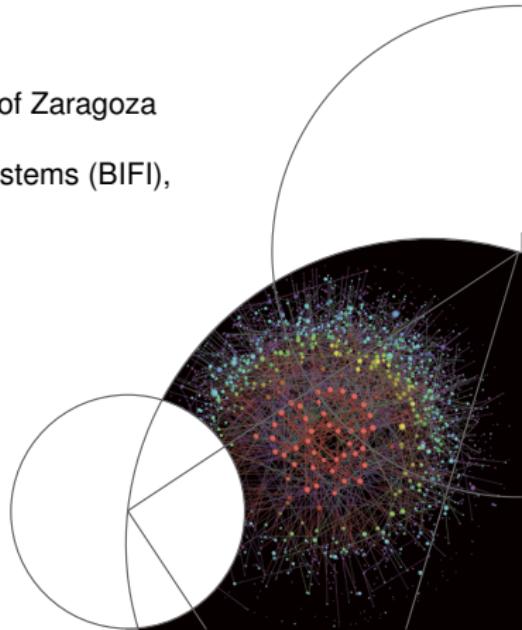
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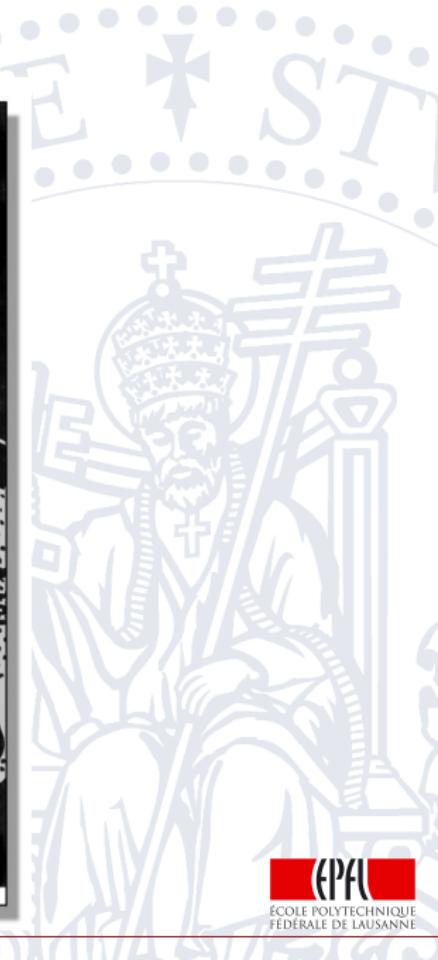
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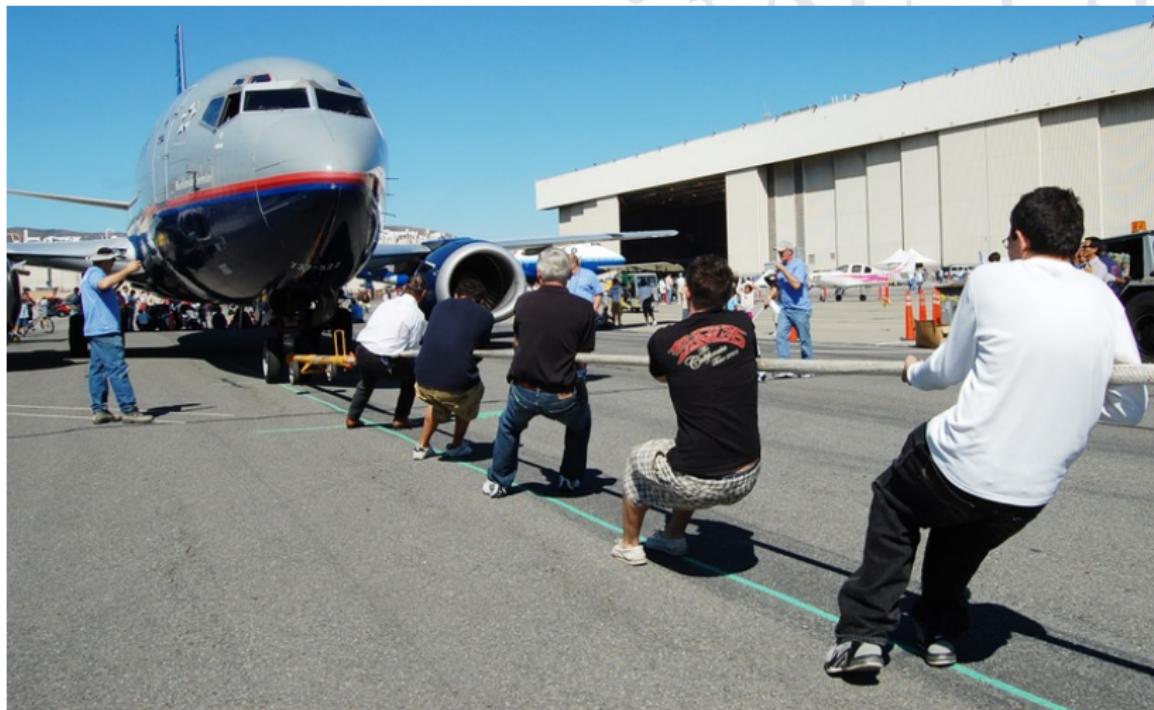
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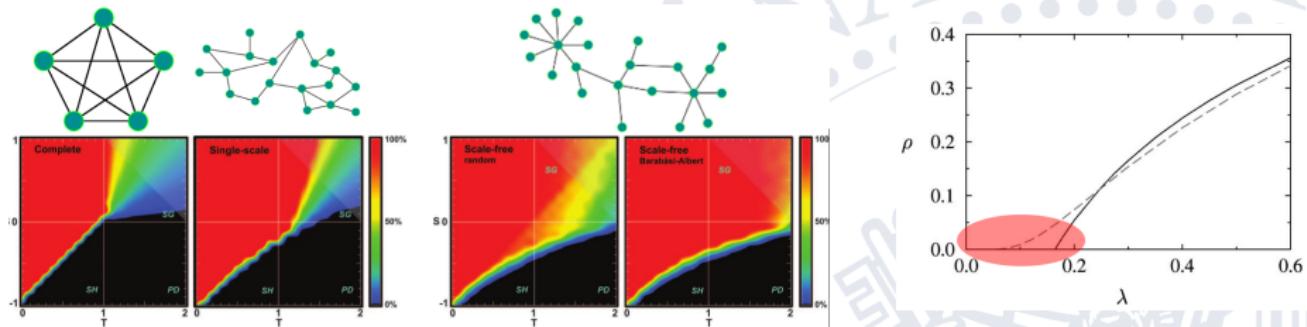
# Vaccination dilemma



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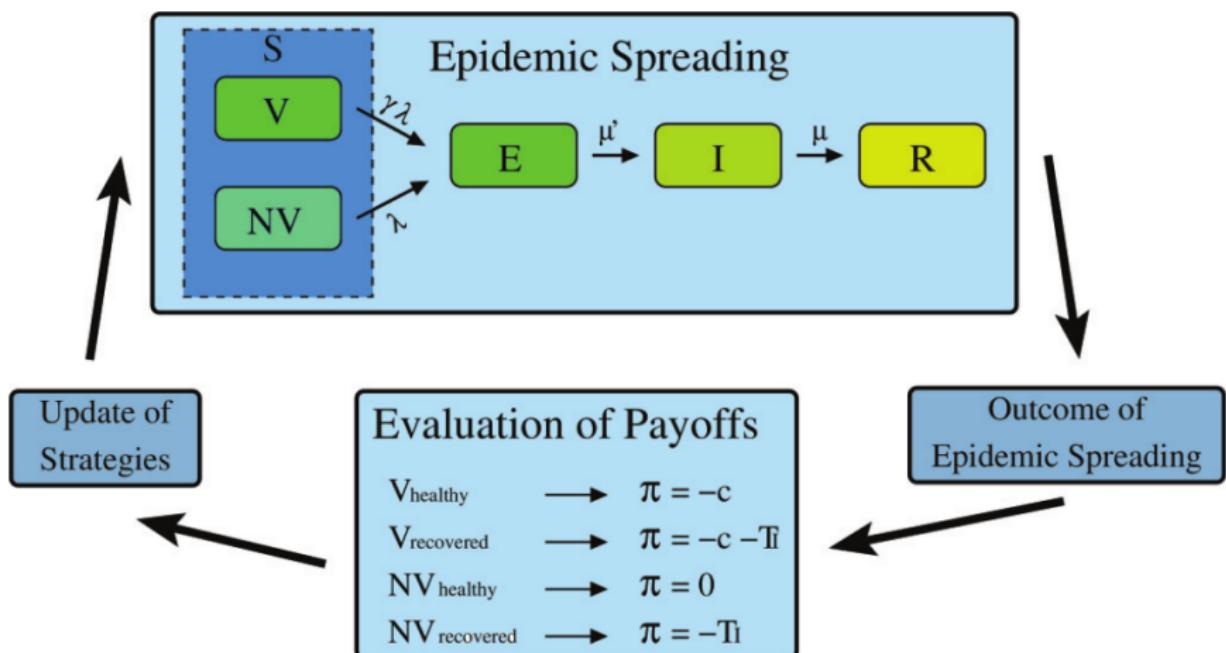
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## Clash of titans

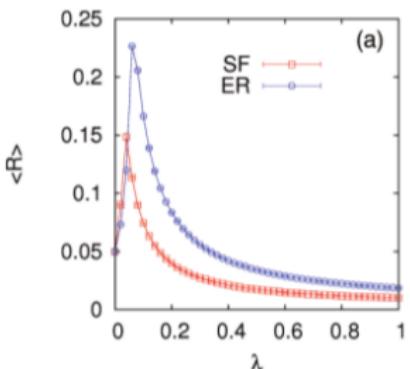
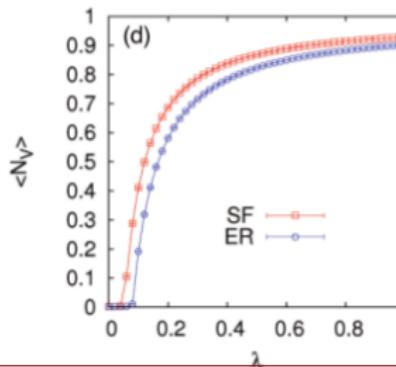
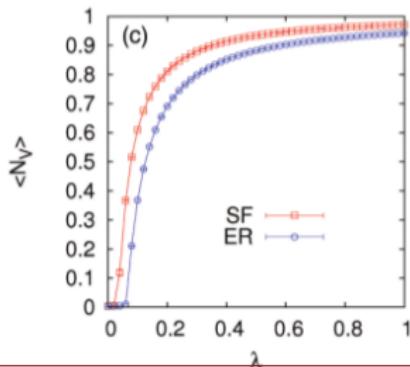
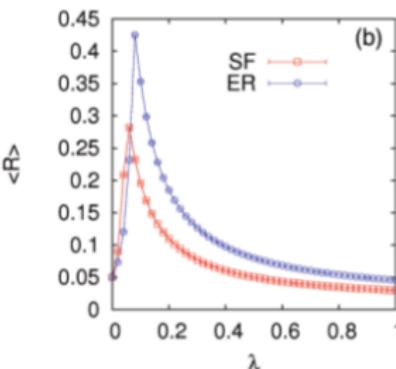


**Cooperation VS Spreading  
who will prevail?**

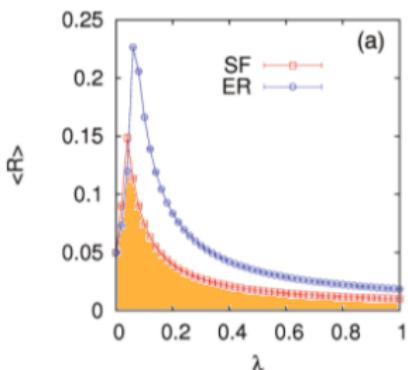
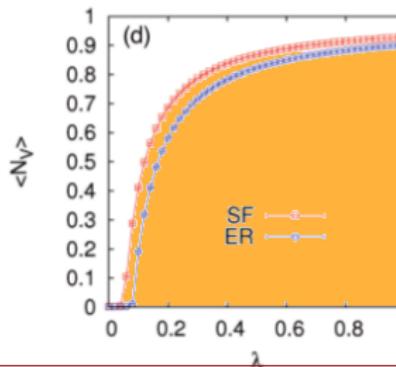
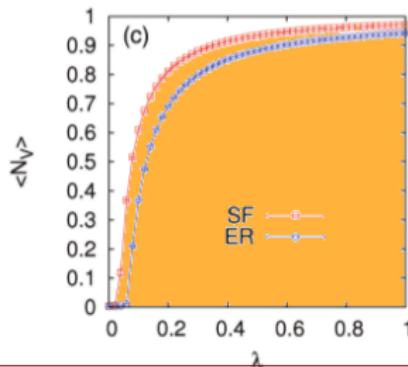
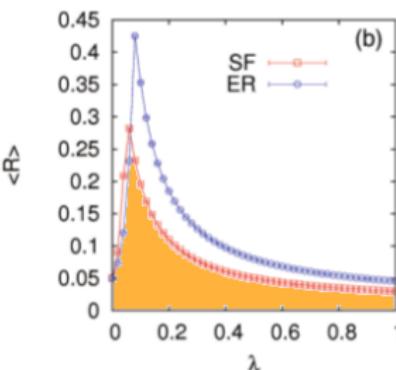
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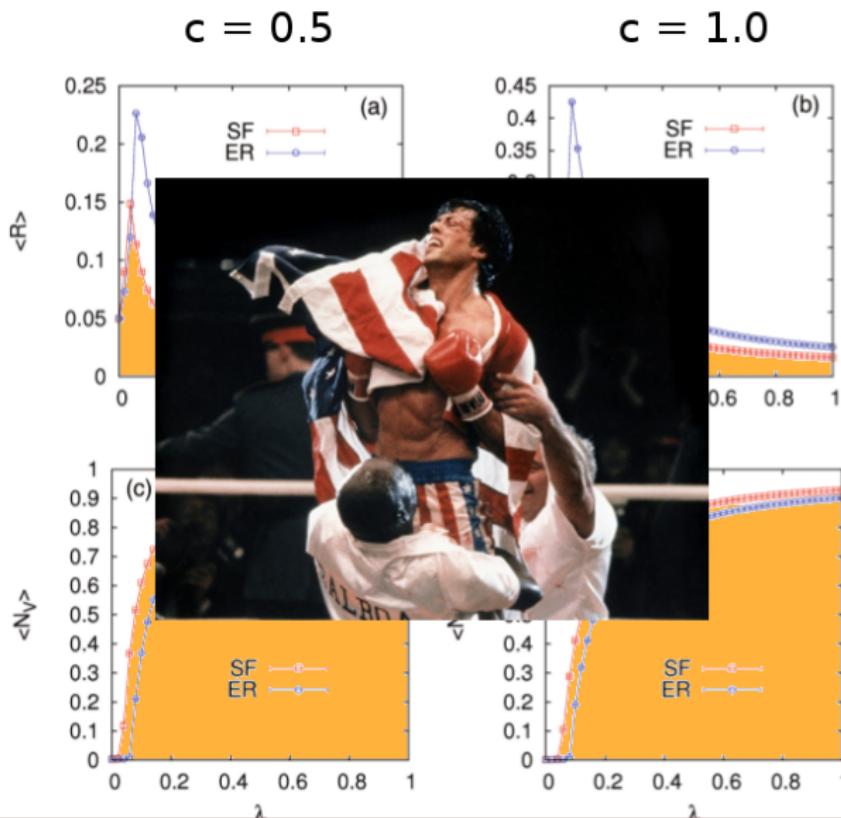
# Role of topology – ideal case ( $\gamma = 0$ )

**c = 0.5****c = 1.0**

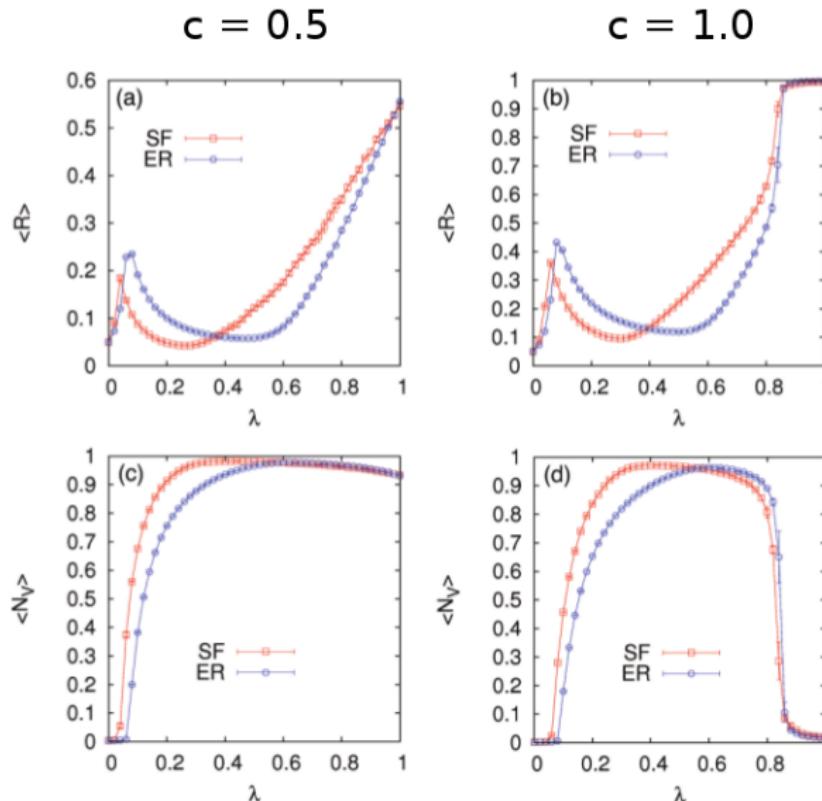
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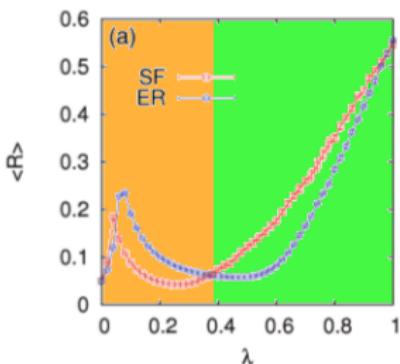
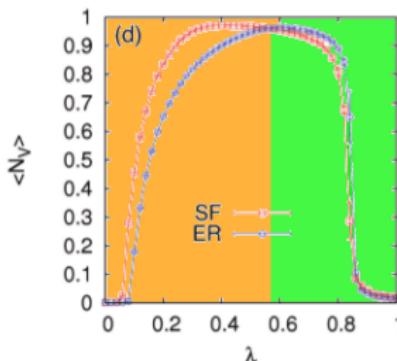
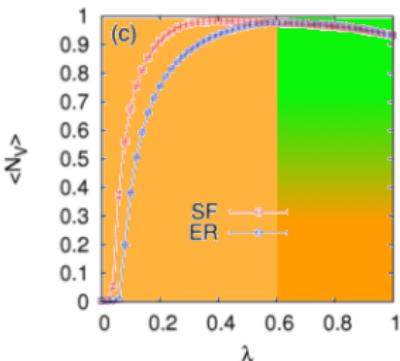
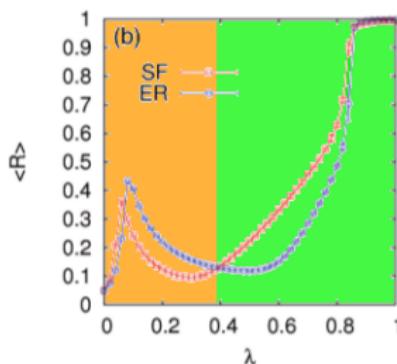
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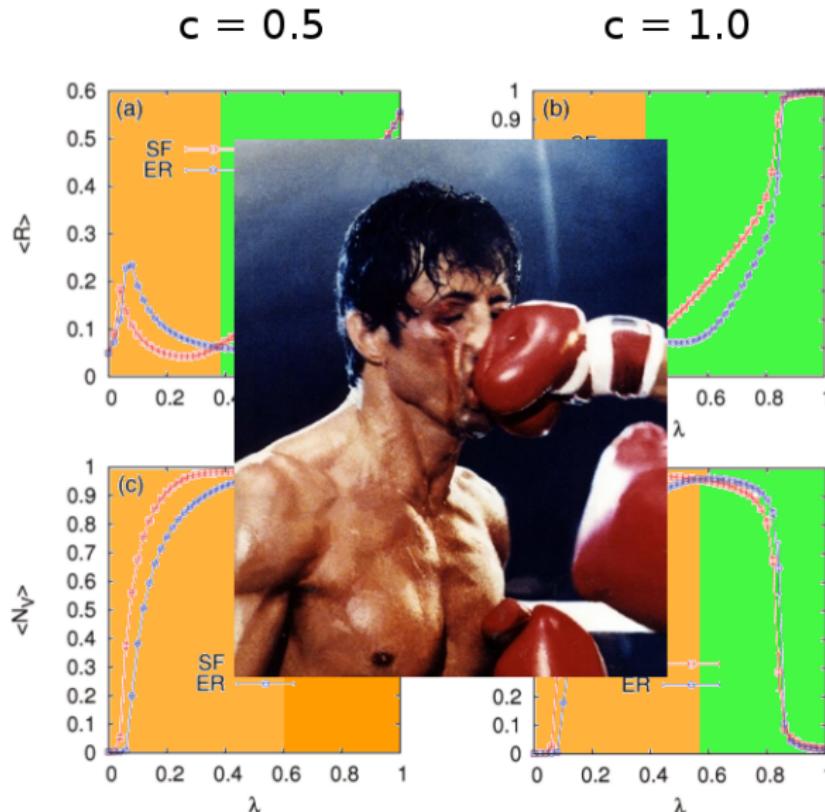
# Role of topology – realistic case ( $\gamma \neq 0$ )



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## Conclusions & Acknowledgements



Coevolution is like an open match!

# Conclusions & Acknowledgements

## PHYSICAL REVIEW E

*statistical, nonlinear, and soft matter physics*

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### Evolutionary vaccination dilemma in complex networks

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