Timoteo Carletti

The mathematics of opinion spreading
in social networks

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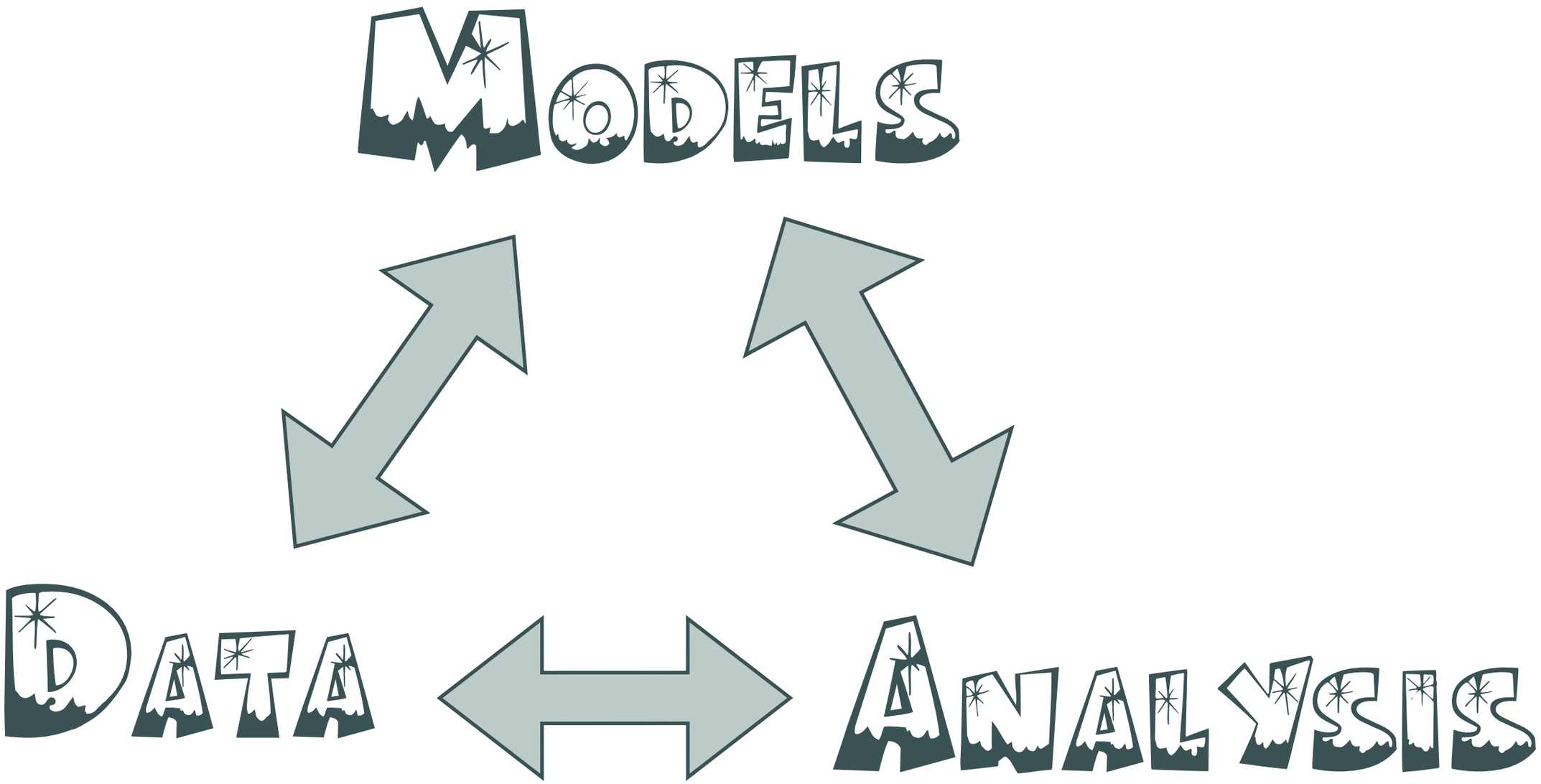

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“Spam” Monty Python sketch, (series 2, episode 12, 1970), by Terry Jones and Michael Palin.

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SPAM® BRAND

Hormel Foods

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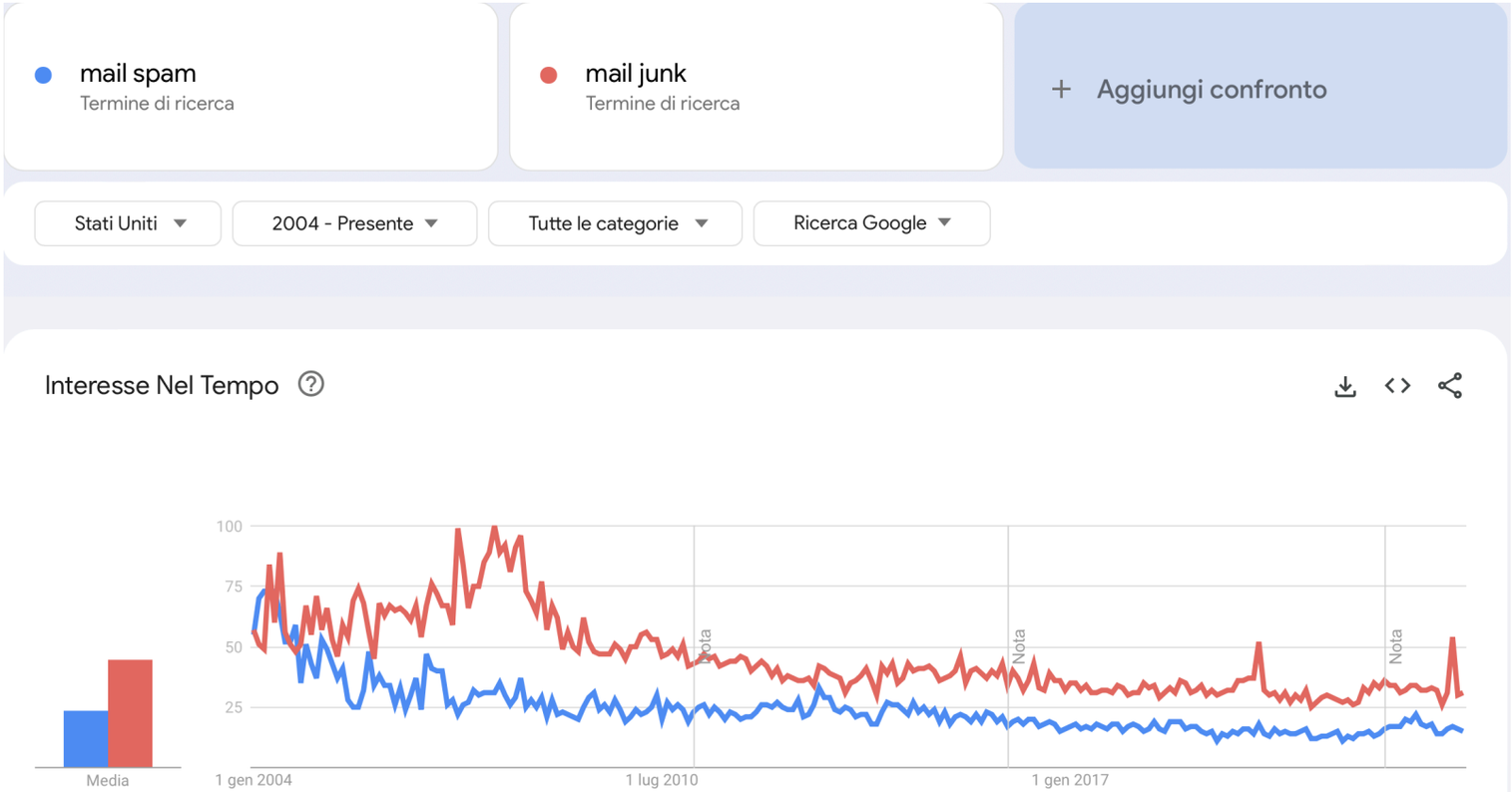

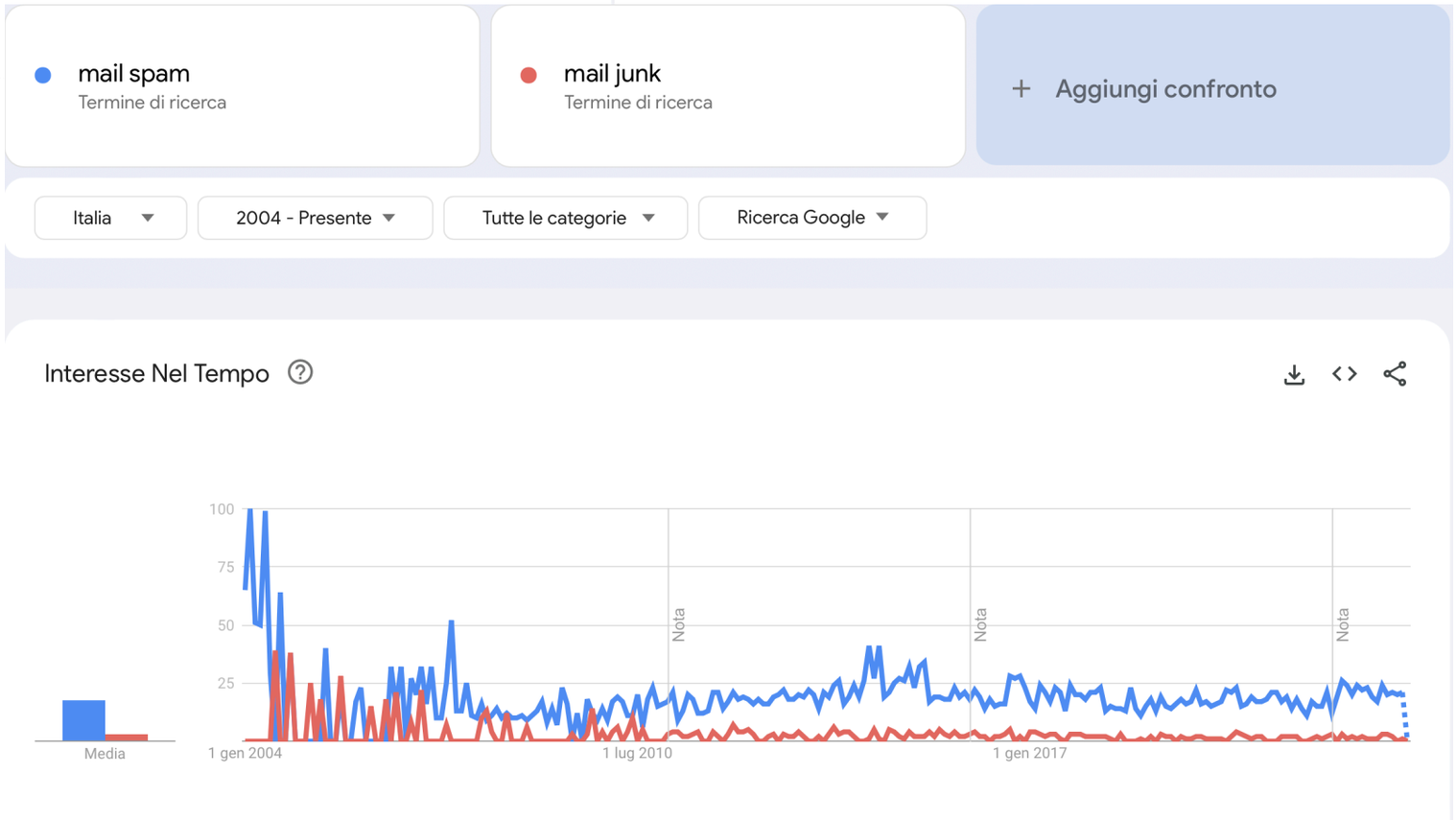

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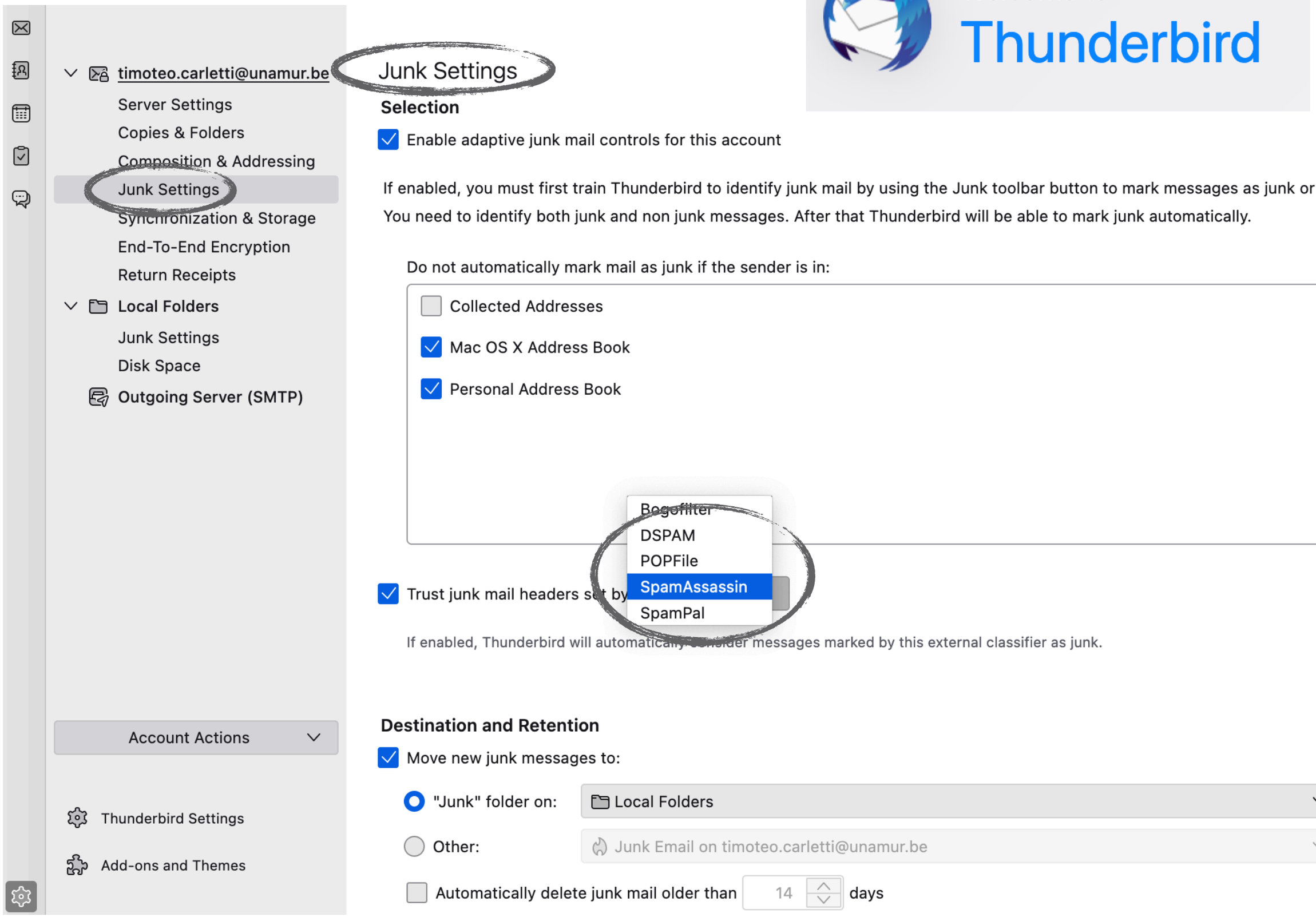

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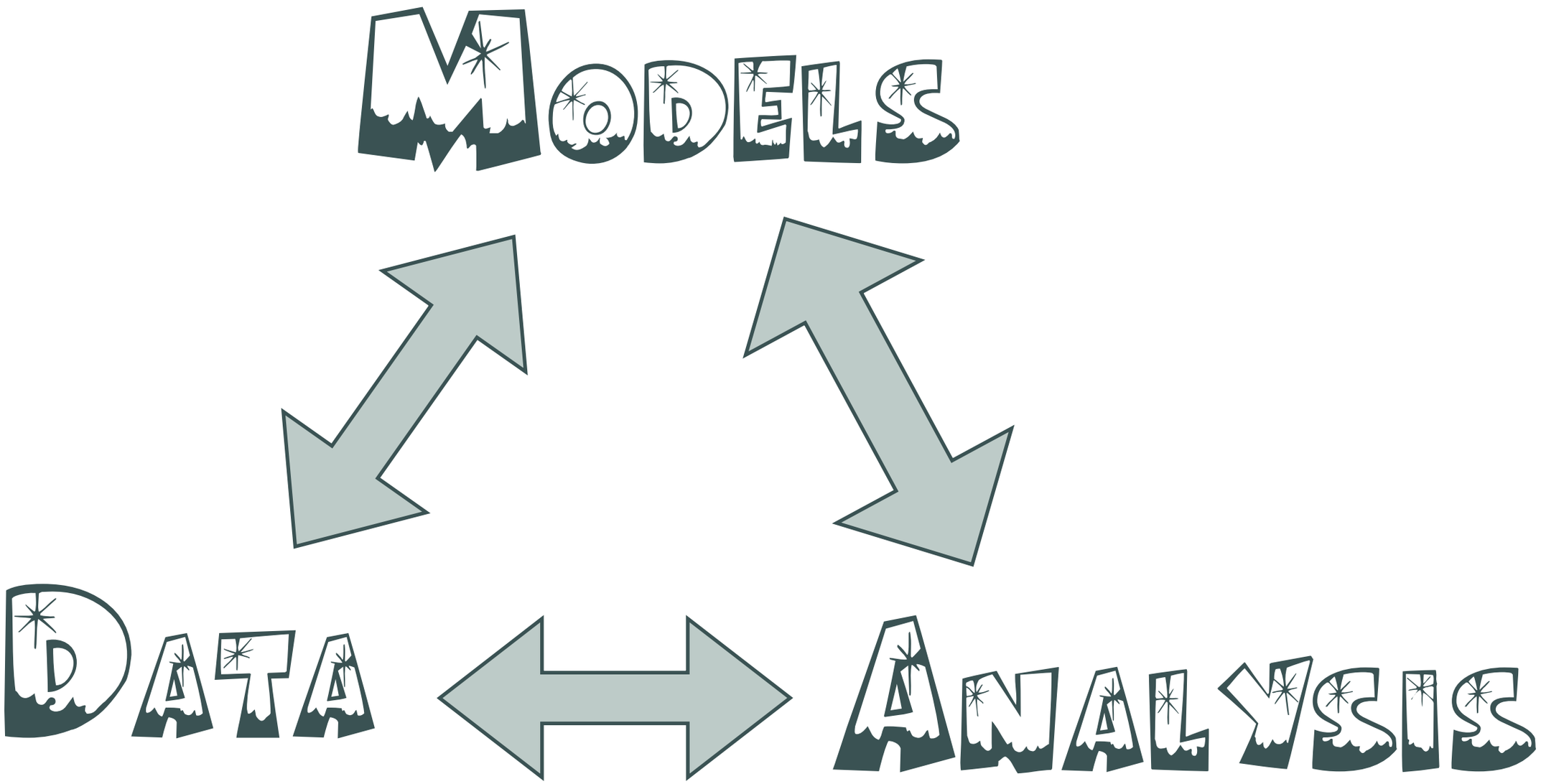

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All models are wrong but some are useful

Box, George E. P. (1979), "Robustness in the strategy of scientific model building", in Launer, R. L.; Wilkinson, G. N., Robustness in Statistics, Academic Press, pp. 201–236.

What matters is the question you are interested in and the level of precision you want to achieve.

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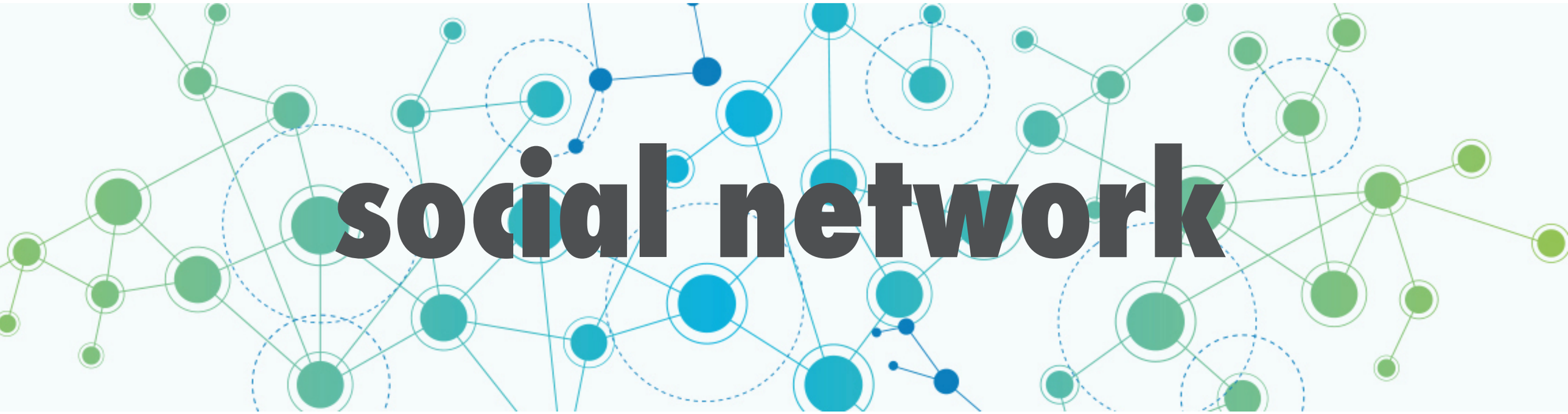
myself



social network

interaction rules

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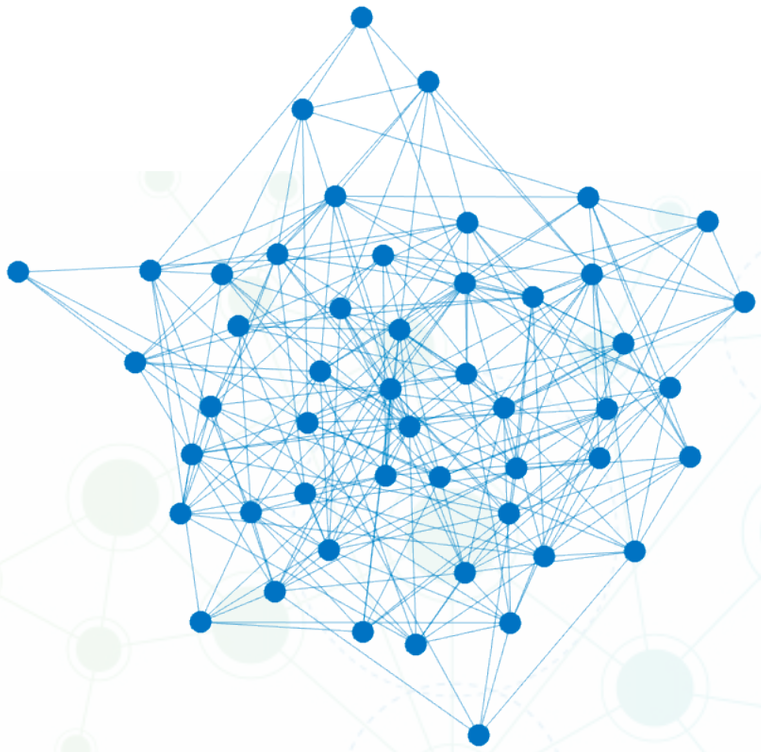
Random Network (Erdős–Rényi)



Every couple of nodes is connected with some probability

Scale Free Network

Few nodes have a large number of connections (hubs) while many nodes have just one or two connections

Small World network

Every two nodes are “very close” each other

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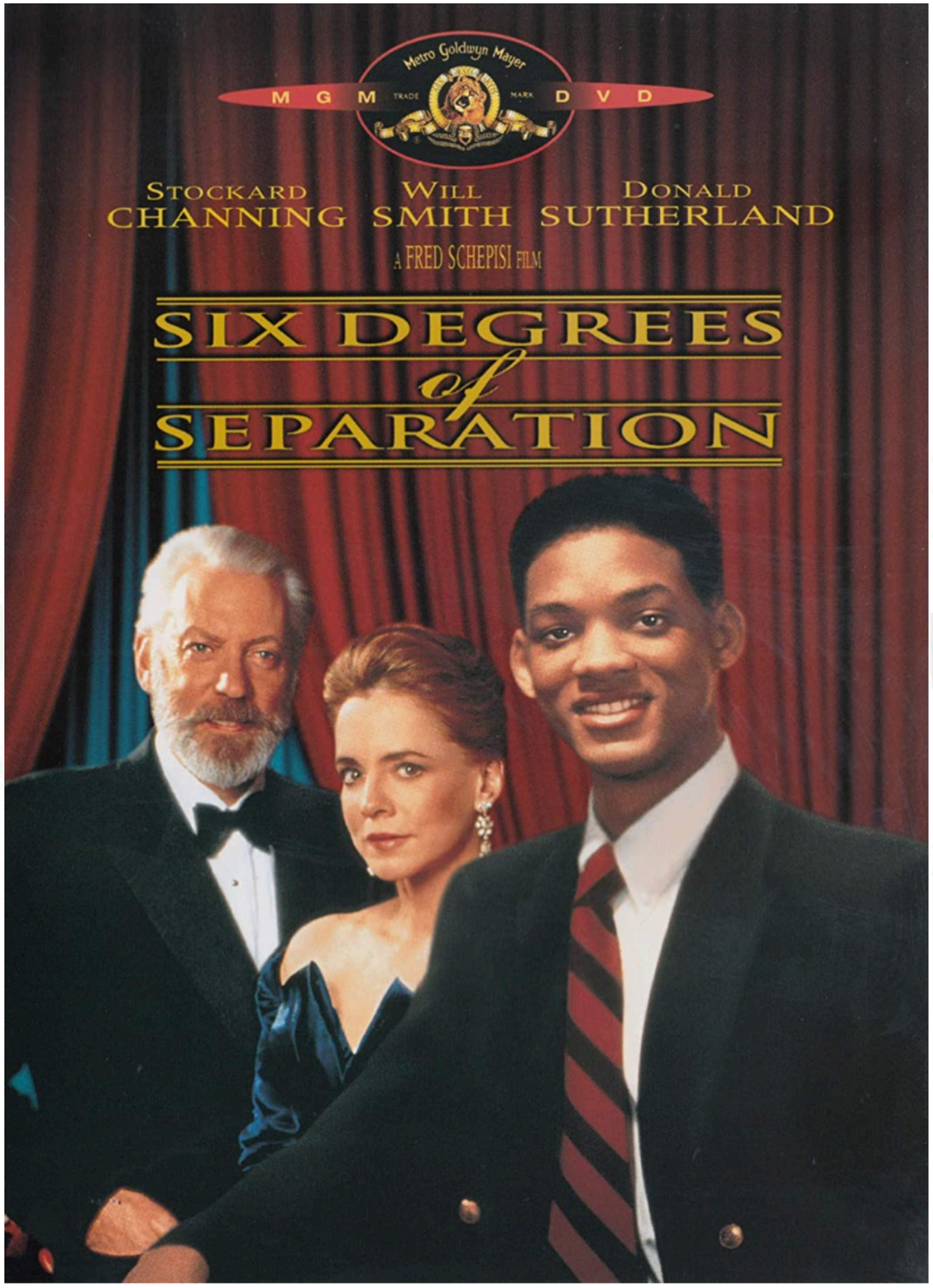

Small World network

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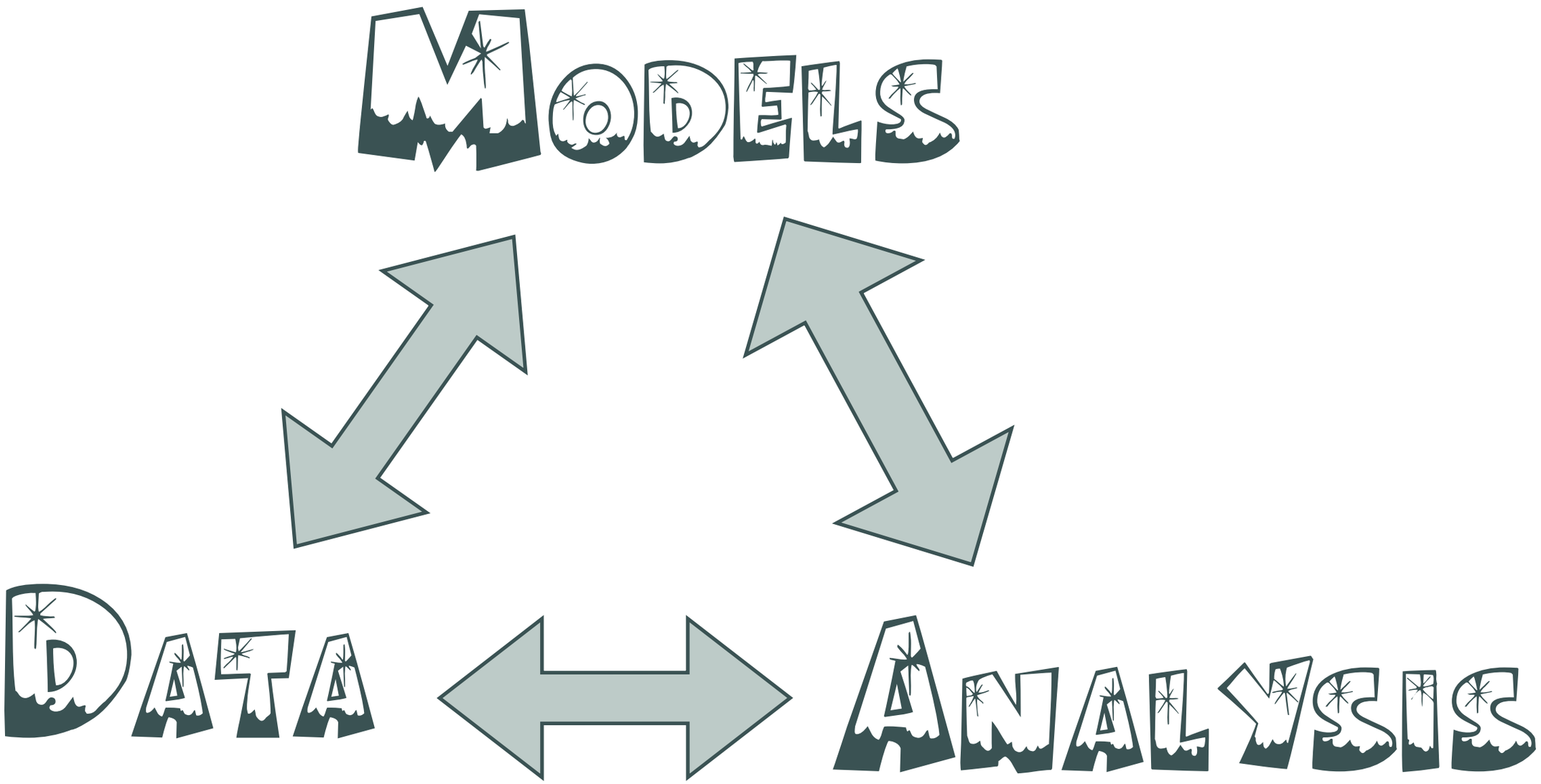

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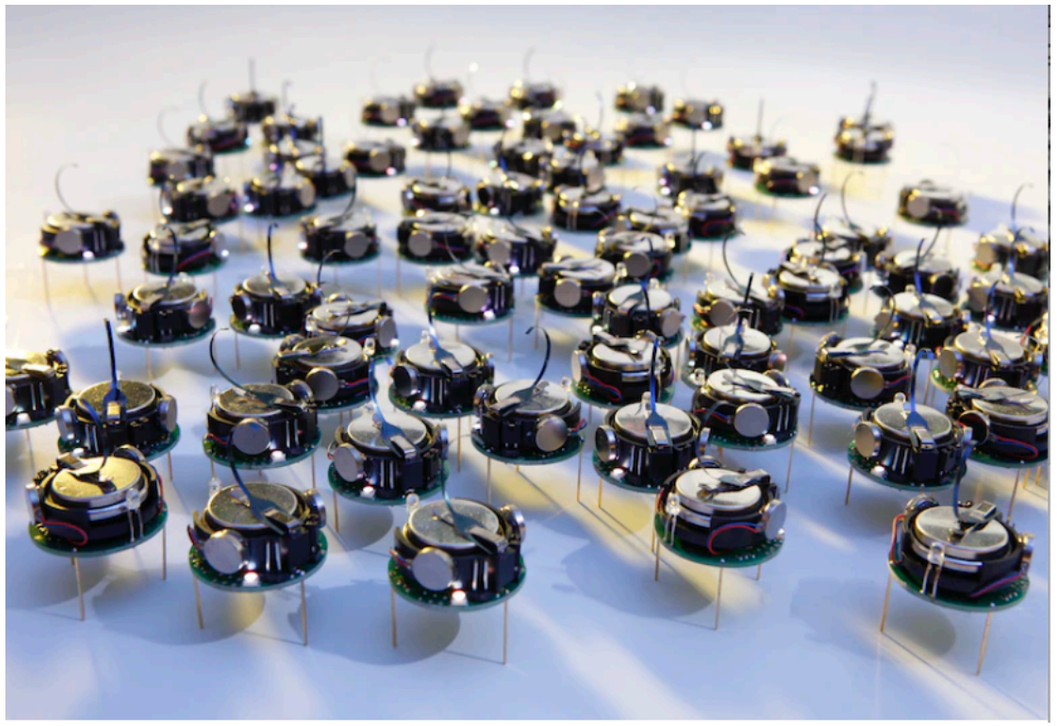

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