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THE ROLE OF TIME DELAYS IN GENE REGULATORY NETWORKS

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This talk discusses the dynamics of gene regulatory networks in the context of cell differentiation. Cell fate decisions are known to be controlled by a large number of factors, and in this talk a special attention will be paid to the role played by transcriptional and translational time delays. Different scenarios, including multi-stability and switching between different states will be discussed to illustrate possible behaviours [1].

References

- [1] K. Parmar, K. B. Blyuss, Y. N. Kyrychko, and S. J. Hogan (2015). *Time-Delayed Models of Gene Regulatory Networks* K., Computational and Mathematical Methods in Medicine, **2015**, 347273.