

Folder	scriptsName	Description	outData	outFigures
1uniNoiseExpression/scriptsMain	unRegulatedBurst	one gene with burst expression	controlUnRGA_yg*	
	unRegulatedConst	one gene with constitutive expression		
	regulatedBurst	one gene self-regulated with burst expression	controlRGA_yg*	
	regulatedConst	one gene self-regulated with constitutive expression		
	ActivatorInhibitorBurst	Activator-Inhibitor with burst expression	controlAIGA*_*_yg*, A: Activator, I: Inhibitor, the first letter is the gene for which the parameters are chaging, the second one indicates the gene to which the results belong	1. controlGAAIA_A_koff.png, this plot is of gene A when its parameters are changed 2. controlGAAIA_I_koff.png, this plot is of gene I when it is changed the parameters of gene I
	ActivatorInhibitorConst	Activator-Inhibitor with constitutive expression		
2uniNoisePropReg/scripts	ActivationConstBurst	Activation regulation with constitutive expression for activator and burst expression for activated gene		
	ActivationBurstConst	Activation regulation with burst expression for activator and constitutive expression for activated gene		
	InhibitionConstBurst	Inhibition regulation with constitutive expression for activator and burst expression for activated gene		
	InhibitionBurstConst	Inhibition regulation with burst expression for activator and constitutive expression for activated gene		
	ActivationConst	Activation regulation with constitutive expression for both activator and activated gene		
	ActivationBurst	Activation regulation with burst expression for both activator and activated gene	controlABGA*_*Ayg*, A: Regulator, B: Regulated, the first letter is the gene for which the parameters are chaging, the second one indicates the gene to which the results belong	graficasABGAActivationkgA*ygA*.pdf, graphs for both regulator and regulated gene when it is changed the regulator parameters (kg is Kon, yg is Koff )
	InhibitionConst	Inhibition regulation with constitutive expression for both activator and activated gene		
	InhibitionBurst	Inhibition regulation with burst expression for both activator and activated gene	controlABGA*_*Iyg*, A: Regulator, B: Regulated, the first letter is the gene for which the parameters are chaging, the second one indicates the gene to which the results belong	graficasABGAIinactivationkgA*ygA*.pdf, graphs for both regulator and regulated gene when it is changed the regulator parameters (kg is Kon, yg is Koff )
3multiMethodEvaluation	controlRGA	It simulates a self-regulated gene with GA		
	regulatedCLE1	It simulates a self-regulated gene with CLE for burst in mRNA but no in protein (CLE1)		burstmRCLE_*.png, FF and CV2 for a range of values of some kinetic parameters
	regulatedCLE2	It simulates a self-regulated gene with CLE for burst in protein but no in mRNA (CLE2)		
	regulatedCLE3	It simulates a self-regulated gene with CLE for burst both in mRNA and in protein (CLE3)		bothBRCLE_*.png, FF and CV2 for a range of values of some kinetic parameters
4multiNoiseCommunityE	regulatedBurstColony	It simulate a colony of cells expressin a self-regulated gene. It allows to variate the kinetic parameters		
	regulatedBurstColonyDifSize	It simulate a colony of cells expressin a self-regulated gene. It allows to variate the diffusion coefficient and colony size		-3variables_sameEscala.png, FF for simulations of coupled and decoupled cells -todosEntropy/FF/Mean.png, entropy of FFs/FF/Mean in coupled cells for all kinetic parameters evaluated