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Instructions: watch the video. Pause it at the indicated times, and answer the question before re-starting.

https://www.youtube.com/watch?v=xo-7m0YnN8o&index=1&list=PLx1I6vEp40NQgAS0wxs53Y9A8-8cL9h_y

14:00, 22:00
What is meant by autoregulation?

16:00
What is the choice he uses for the "null model," and what is its purpose?

24:00
What is f(Y)? Which separation of timescales is used to estimate f(Y)?

29:00
Why is Y_st called a fixed point? How do we know it is stable?

40:00
Why might there be an overshoot in the production of Y in the case of negative autoregulation?

42:00
Where does the Hill coefficient come from in the physical system?

What does K represent?

Why is negative autoregulation more robust to noise than simple regulation?

How might negative autoregulation contribute to organismal fitness?

1:04:00 Answer the question!

1:20:00 How does positive autoregulation slow responses and increase noise?