The Lyapunov exponents of positive solutions of a perturbed system of functional differential equations

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We will consider perturbations of a linear autonomous system of retarded functional differential equations. It is known that with the possible exception of small solutions the Lyapunov exponents of the solutions are the real part of the eigenvalues of the unperturbed linear part. In this talk we will show that if the solution is positive, then its Lyapunov exponent is an eigenvalue of the unperturbed equation with a positive eigenfunction.

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