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Gro Hovhannisyan* (ghovhann@kent.edu) and **Oliver Ruff** (oruff@kent.edu). *On oscillatory solutions of linear differential equations with complex constant coefficients*. Preliminary report.

We consider the initial value problems for the second and third order linear differential equations with complex constant coefficients. We describe the necessary and sufficient conditions of the existence of oscillatory solutions. Proofs are based on analysis of the zeros of solutions represented as a linear combination of exponential functions. (Received January 28, 2014)