Some approximate controllability results for bilinear systems

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This talk is complementary to the one of Karine Beauchard. Here, I will present a brief overview on approximate controllability results for bilinear systems. I will mainly focus on three approaches:

- a Lyapunov approach, developed by Nersesyan and Beauchard-Nersesyan;
- an approach based on the control properties of Galerkin approximations of the system, developed by Boscain, Caponigro, Chambrion, Mason, Sigalotti;
- an approach based on the control properties of an easy approximate system deduced by using the scales of the equation, based on the works by S.E., Puel.