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Scaling the Response of Separating Turbulent Boundary Layer to Pulsed Excitation SEIFERT AVRAHAM<sup>1</sup>, VITALI PALEI<sup>2</sup>, School of Mech. Eng., Tel Aviv University — The talk will start by offering the presenters view of active flow control current status, main challenges and future directions. Then recent experimental results of turbulent separating boundary layer, subjected to pulsed excitation will be presented and discussed. A search for instability mechanism did not result in any disturbances that were amplified. Therefore, pulsed excitation that intermittently enhances the skin friction with optimal time lag was sought. Scaling the response of the excited flow leads to dimensionless optimal magnitude and repetition rates.

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