Optically driven adiabatic transfer processes: Historical perspective and new developments

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First, comments about how the method of stimulated Raman adiabatic passage came about will be offered and key steps along the line will be mentioned. Second, new developments and applications of STIRAP, mainly from labs outside of Kaiserslautern, will be presented. These new developments include optically driven adiabatic transfer processes in a solid state environment, progress towards making ultracold molecules from degenerate atomic quantum gases, as well as new insight into how to optimize the transfer efficiency and attempts to apply the STIRAP concept in classical systems. Obviously, a detailed discussion of all those aspects is not possible, rather some key aspects will be mentioned and commented on.