998-60-149 **Onesimo Hernandez-Lerma*** (`ohernand@math.cinvestav.mx`), Av. IPN 2508 Mexico City, Mexico. *Zero–Sum Continous–Time Markov Games in Countable Spaces with Discounted and Average Payoffs.*

We present recent results on zero-sum continuous-time Markov games with denumerable state space, Borel action sets, and possibly unbounded transition and payoff rates. Among other results, conditions are given for the existence of optimal stationary strategies for both discounted and average payoff criteria. Extending the average case, we also consider bias and weakly overtaking equilibria. The talk summarizes joint work of the author with X.P. Guo and T. Prieto–Rumeau. X.P.Guo, O. Hernandez–Lerma (2003). "Zero-sum games for continuous–time Markov chains with unbounded transition and average payoff rates". J. Appl. Prob. **40**, pp. 327-345. X.P.Guo, O. Hernandez–Lerma (2003). "Zero-sum continuous–time Markov games with unbounded transtion and discounted payoff rates". Submitted. T. Prieto–Rumeau, O. Hernandez–Lerma (2004). "Bias and overtaking equilibria for zero–sum continuous–time Markov games". Submitted. (Received February 23, 2004)