

# Minmax and Maxmin of Repeated Games with Incomplete Information

Jean-Francois Mertens and Shmuel Zamir

## Abstract

For a class of 2-Person 0-sum repeated games with incomplete information, *Aumann/Maschler* [1967] and *Stearns* [1967] have given a necessary and sufficient condition for the existence of  $v_\infty$  (the value of the infinitely repeated game). *Mertens/Zamir* [1971] and *Mertens* [1971/72] have given the formula (and thus proved the existence) of  $\lim_{n \rightarrow \infty} v_n$ , the limit of the values of the games with  $n$  repetitions, for a much larger class of games than that treated by *Aumann/Maschler* and *Stearns*. In this paper we extend the *Aumann/Maschler–Stearns* results to the larger family of games studied by *Mertens* [1971/72].