957-26-227 **Giuseppa Riccobono*** (ricco@dipmat.math.unipa.it). *A nonabsolutely convergent PU-integral.*

Consider a measurable compact metric space and define on it a PU-integral,i.e. an integral defined by partitions of unity of non negative measurable and integrable functions. Some necessary and sufficient conditions are given in such a way that a function to be PU-integrable and the space of PU-integrable functions contains properly the integrable functions (i.e. the functions integrable respect to the measure defined in the space). Then some convergence theorems and the measurability of a PU-integrable function are proved and an exemple of a PU-integrable but non integrable function is given. (Received July 12, 2000)