957-28-13 Shizu Nakanishi* (shizu.nakanishi@nifty.ne.jp), 4-15 Jonanteramachi, Osaka 543-0017, Japan. Nuclear mappings and a Riemann approach to vector valued integration. Preliminary report.

We will propose a family of vector spaces defined to be a natural setting under which we consider vector valued functions integrable in the generalized Riemann sense, using nuclear mappings. These spaces are treated as the union of countably semi-normed spaces. The family contains all the spaces published in [Mathematica Japonica, 39(1994), 309-335; 47(1998), 367-396]. (Received April 17, 2000)