Brainstorming on New Permanent Magnet Undulator Designs, B. DIVIACCO, S. SASAKI, R.P. WALKER, Sincrotrone Trieste - Various new permanent magnet undulator designs are presented, including modified quasi-periodic structures capable of generating both circular and linear polarization, as well as other linear and variably polarized schemes with reduced harmonic intensity and on-axis power density. A comparison of the performance of the various schemes is made for the practical application of a low photon energy device for ELETTRA.