

Abstract Submitted
for the NES11 Meeting of
The American Physical Society

Geometric Laws in the Periodic Table of Elements ALBERT KHAZAN, IMET — Despite many versions of the Periodic table of Elements were suggested, no one discussed the problem how the elements are connected to each other inside the Groups and Periods of the Table. As is known, the Groups are joined along the vertical (18 Groups in total), while the Periods are joined along the horizontal (7 Periods; we also suggest Period 8). Period 1 consists of 2 elements, Periods 2 and 3 : 8 elements each, Periods 4 and 5 : 18 elements each, Periods 6 and 7 : 32 elements each, and Period 8 : 37 elements. Dependency of the number of elements in each Period on its number is expressed with a broken line, described by equations of the respective linear intervals. It is shown that, according to the dependency of the common number of elements in each Period on its number, all Periods are joined into three sections, for the elements of all 18 Groups: Periods 1-3 ($y=8x-6$), Periods 3-5 ($y=18x-36$), Periods 5-7 ($y=32x-106$), Periods 7-8 ($y=37x-141$). For the elements of Group 1, we obtain a respective line. The region created by these two lines includes all elements of the Periodic Table (Khazan A. Progress in Physics, v.4, 2010, 64).

Albert Khazan
IMET

Date submitted: 24 Feb 2011

Electronic form version 1.4