

THE RING $\prod_{n=1}^{\infty} F_{p_i}$

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This poster presents the structure of the ring $\prod_{n=1}^{\infty} F_{p_i}$, where p_i is the i^{th} prime, $p_1 = 2; p_2 = 3; \dots$, and details a relationship of principal ideals within the ring with subsets of the natural numbers.

We try to understand the ring by determining if it is finitely generated, a Von Neumann regular ring, and the relationship with the weak direct product. We examine first order definable sets in this ring and attempt to topologyze it using dictionary order. Also we present the elements with torsion and cyclotomic polynomials.

Joint work with Sergio Palomo (City University of New York).