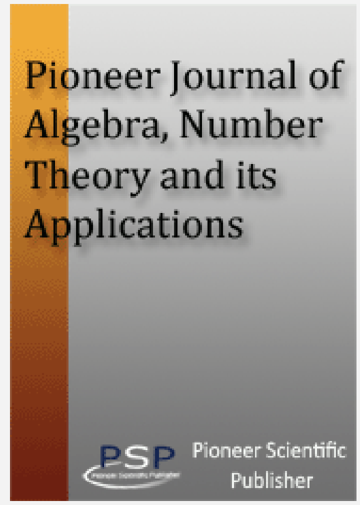
Pioneer Journal of Algebra, Number Theory and its Applications

Volume 10, Issues 1-2, Pages 1-31 (September & December 2015)

ISSN: 2231-1831



DES APPLICATIONS GÉNÉRATRICES DESNOMBRES PREMIERS ET CINQ PREUVES DE L'HYPOTHÈSE DE RIEMANN

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Received August 23, 2015; Re-Revised September 21, 2015

Abstract

We prove that there exists one application $\psi(\psi^-, \psi^+)$ on $\mathbb{R}^2$ such that $\mathcal{P} = \{\pm 2, \pm 3\} \bigcup 6 \times \mathcal{F}^- + 1 \bigcup 6 \times \mathcal{F}^+ - 1$, where $\mathcal{P}$ is the set of relatively prime numbers, $\mathcal{F}^- = \mathbb{Z} \bigcap (\psi^+(\mathbb{Z}^* \times \mathbb{Q} \setminus \mathbb{Z}) \setminus \psi^+(\mathbb{Z}^* \times \mathbb{Z}^*))$ and $\mathcal{F}^+ = \mathbb{Z} \bigcap (\psi^-(\mathbb{Z}^* \times \mathbb{Q} \setminus \mathbb{Z}) \setminus \psi^-(\mathbb{Z}^* \times \mathbb{Z}^*))$. And we will give an algorithm that allows both to generate prime numbers and confirm that $\mathcal{P}$ is indeed determined by the mapping $\psi(\psi^-, \psi^+)$ that we will apply in some proofs of the Riemann hypothesis.

Keywords and phrases: prime numbers, Riemann hypothesis.