

EXTRACT FROM OP-SF NET

Topic #4 ----- OP-SF NET 21.1 ----- January 15, 2014

From: Peter Clarkson

Subject: Constructive Approximation “Painlevé Equations” special issue

The latest issue of Constructive Approximation is part one of the special issue, entitled “Painlevé Equations” with guest editors Percy Deift and Alexander Its, which is freely available for downloading until January 31, 2014. The link is <http://link.springer.com/journal/365/39/1/page/1>

The articles are:

Introduction

Percy Deift and Alexander Its

Global Asymptotics of the Second Painlevé Equation in Okamoto’s Space

P. Howes and N. Joshi

Painlevé I, Coverings of the Sphere and Belyi Functions

Davide Masoero

Relations Between Linear Equations and Painlevé’s Equations

S.Y. Slavyanov

Distributions of Poles to Painlevé Transcendents via Padé Approximations

V.Y. Novokshenov

Numerical Solution of Riemann–Hilbert Problems: Random Matrix Theory and Orthogonal Polynomials

Sheehan Olver and Thomas Trogdon

Automatic Deformation of Riemann–Hilbert Problems with Applications to the Painlevé II Transcendents

Georg Wechsberger and Folkmar Bornemann

Painlevé Kernels in Hermitian Matrix Models

Maurice Duits

The Tacnode Riemann–Hilbert Problem

Arno Kuijlaars

The Relationship Between Semiclassical Laguerre Polynomials and the Fourth Painlevé Equation

Peter A. Clarkson and Kerstin Jordaan

Painlevé Functions and Conformal Blocks

N. Iorgov, O. Lisovyy, A. Shchekhin and Y. Tykhyy