

A SPECIAL ISSUE

Selected papers presented at

**Third Buea International Conference
on the Mathematical Sciences**

in conjunction with

**International Summer School on
Financial Mathematics and Actuarial Sciences**

University of Buea, Cameroon

Summer School: April 22–May 3, 2013

International Conference: April 30–May 3, 2013

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Preface

Fueled by the growing understanding of the major role mathematics plays in advancing scientific research and local economies, the Buea Conference series was initiated to establish a forum to support and enrich the African Mathematical Science community by substantially increasing collaborative exchanges and contacts between the community of Mathematical Scientists and educators working within Africa and those working outside Africa. Hosted by the Department of Mathematics at the University of Buea, Cameroon, the inaugural conference was held from May 12 to 16, 2009, in conjunction with a US National Science Foundation-sponsored workshop on Mathematical Biology. The second conference was held from May 12 to 16, 2011, in conjunction with an adjoining CIMPA-sponsored two-week summer school on Mathematical Analysis, while the third conference held from April 30 to May 3, 2013, in conjunction with a US NSF-sponsored two-week summer school on Actuarial and Financial Mathematics.

As a networking and capacity building opportunity, the 2013 conference and school fall within the context of ongoing efforts to ensure a well-equipped group of scientists who are adequately prepared to contribute towards lasting solutions to prevailing challenges within the local and global society. It synergizes with new and established initiatives such as the establishment of specialized African Universities of Science and Technology (e.g AUST-Abuja, the African Unions PanAfrican University network, the African Millenium Mathematical Science Intitiative, the African Mathematical Institutes Network (AMI-Net), the recently (2012) created Poles d'Excellence Technologique Universitaires (or University Centers for Research Excellence) in Central African States and (2013) World-Bank funded African Centers of Excellence.

While the series features a broad appeal, the focus of the 2013 summer school and conference was on Actuarial and Financial Mathematics. Participants from several countries were treated to lectures and hands-on exercises by noted lecturers and leaders in the field from Europe and USA. Of the many articles presented at the conference, very few were selected in keeping with the scope and editorial policy of COSA, and the aims of the conference. Our hope is that the contents of this special edition would continue to serve our united quest for knowledge.

The editors thank Nkem Khumbah for his input to the preface and for spear-heading the Buea conference series.

Julius N. Esunge and Aurel I. Stan