

Abdus Salam School of Mathematical Sciences

ASSMS INTENSIVE COURSE

ON

The Introduction to Differential Forms

October 26 - December 05, 2016

Resource Persons:

Prof. Johann Davidov

Introduction:

Differentiable (skew-symmetric) forms play an important role in many branches of mathematics – modern treatment of the classical analysis (for example, integration), analysis on manifolds, differential topology, geometry (differential, symplectic, algebraic), etc. The aim of this short course is to present basic facts about differentiable forms.

Contents of the Course:

Exterior forms on vector spaces and Exterior product, Differentiable forms on smooth manifolds, the exterior differentiation, Pull-backs of differentiable forms, the exterior differentiation. Tensor fields (tentative depends on time).

Prerequisites: Basic facts about smooth manifolds, or at least about surfaces in Euclidean spaces. Depending on the schedule, there might be possible that I would give a short account on manifolds.

Schedule:

The course will comprise on 14 lectures (each of 2 hours duration). There will be two lectures per week on Monday and Wednesday. The course is scheduled during October 26 - December 05, 2016.

Organizers:

Dr. Imran Anwar, Absar Ul Haq, Bial Masood

Registration:

There is no registration fee for this course but we are restricted to limited number of participants. Undergraduate students and graduate students can apply to participate in this school by sending this application form ([.doc](#) or [.pdf](#)) before **October 15, 2016** via email to:

asif.sohail@sms.edu.pk

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