

*Seminar:* "Geometry&Physics", DFT (IFIN-HH)  
([Seminar Homepage](#)) ([Indico Page](#))

*Location:* DFT seminar room, IFIN-HH, Magurele

*Date:* Monday, May 14, 2018, 12:00 noon

*Title:* **Canonical construction of invariant differential operators for Lie (super-)algebras and quantum groups**

*Speaker:* **Prof. Vladimir Dobrev** (INRNE, Sofia)

*Abstract:* "We start from the known simple example of Maxwell equations which are invariant w.r.t. the conformal group. We rewrite the Maxwell equations in a form in which their invariance is transparent and the general case of conformally invariant differential operators is easy to explain. This is used also to explain the general canonical construction for Lie algebras and quantum groups. At the end, as examples, are shown the  $q$ -Maxwell equations (and related equations) invariant w.r.t. the  $q$ -conformal group. These constructions are used in the classification of the UIRs of the super-conformal algebras in various dimensions with important applications in superstring theories."