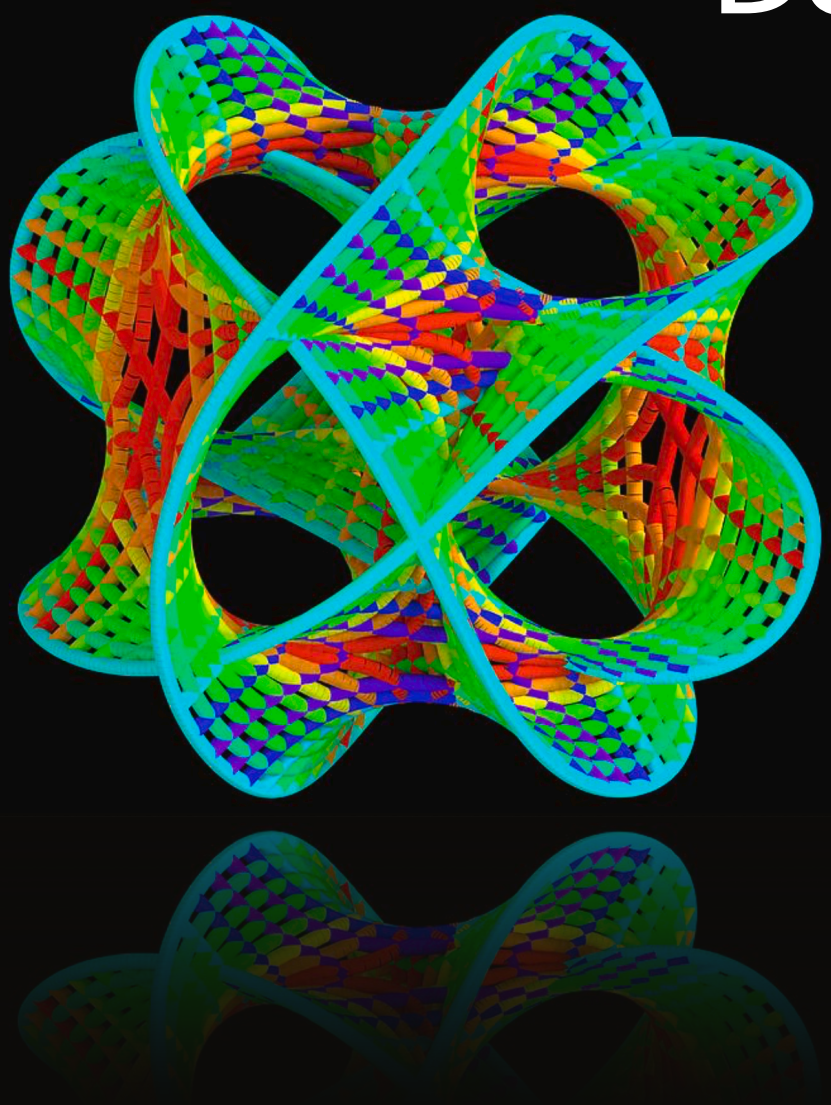
Special lectures in High-Energy Theory

# "SOLITONS, MONOPOLES AND DUALITY"




## Prof. Sergey Ketov

Tokyo Metropolitan University& IPMU


March, 2020

6th Floor Gem Building,
Faculty of Science,
Chulalongkorn University

## Schedule

(1) Non-perturbative versus perturbative (Introduction), on Wed of March 4th, 14:30~

(2) Basic examples of duality in field theory: sine-Gordon solitons and Thirring model, on Thu of March 5th, 14:30~

(3) Dirac monopole and electric-magnetic duality, on Fri of March 6th, 14:30~

(4) t'Hooft-Polyakov monopole in non-abelian gauge theories, on Mon of March 9th, 14:30~

(5) Bogolyubov-Prasad-Sommerfeld bound, Witten effect and S-duality, on Tue of March 10th, 14:30~

(6) N=1, N=2 and N=4 supersymmetric Yang-Mills theories in 4 dimensions, on Wed of March 11th, 14:30~

Break for a week

(7) Classical and quantum moduli space of supersymmetric Yang-Mills theories, on Wed of March 18th, 14:30~

(8) Renormalization and low-energy effective action, on Thu of March 19th, 14:30~

(9) Duality and elliptic curve in Seiberg-Witten theory, on Fri of March 20th, 14:30~

(10) Non-abelian confinement, on Mon of March 23rd, 14:30~

(11) Born-Infeld non-linear electrodynamics and its supersymmetric extensions, on Tue of March 24th, 14:30~

(12) Dilaton, axion and SL(2,R) duality, on March 25th, 14:30~


For more detail: auttakit.c@chula.ac.th