



Free Online Training Programme on Introduction to SageMath

by

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**Conducted under aegis of TEQIP-III, ICT Mumbai
in Collaboration with
MTTS TRUST**

Following are links of series of 12 lectures given by Dr. Ajit Kumar which was live streamed on YouTube during May 20, to June 29, 2020. The topics covered are introduction to SageMath including Sage programming and plotting, Single and Multi variable Calculus, Linear Algebra, Different Equations and Group Theory. These lectures can be a course material for one semester course on Computational Mathematics with SageMath. SageMath handouts and assignments were made available to registered participants and can be requested on a.kumar@ictmumbai.edu.in.

Topics	YouTube Links
A brief introduction to SageMath	https://youtu.be/VPAALHYIwAI
Installation of SageMath	https://youtu.be/sXb58bIstIw
Lecture 1 (Brief Introduction to SageMath)	https://youtu.be/wRqY6rxctYg
Lecture 2 (Plotting in SageMath)	https://youtu.be/Nbn4mZaLINY
Lecture 3 (Programming in SageMath)	https://youtu.be/JAYkyLUoKwQ
Lecture 4 (Calculus of one variable with SageMath)	https://youtu.be/dMiT3b8-xDc
Lecture 5 (Multi-Variable Calculus)	https://youtu.be/zHDIetUgZS4
Lecture 6 (Linear Algebra with SageMath)	https://youtu.be/mv0ag4RUAWQ
Lecture 7 (Linear Algebra with SageMath)	https://youtu.be/8Pgl-7yHn9o
Lecture 8 (Linear Algebra with SageMath)	https://youtu.be/EdRooU1tTks
Lecture 9 (Linear Algebra with SageMath)	https://youtu.be/KU6APQDwWNY
Lecture 10 (Differential Equations with SageMath)	https://youtu.be/kA7vBdMA1Uc
Lecture 11 (Group Theory with SageMath)	https://youtu.be/oJx4QvGRPvU
Lecture 12 (Group Theory with SageMath)	https://youtu.be/agH1QdaNb7U

Links of all the lecture are are also available on

ajitmathsoft.wordpress.com/sagemath