# Resources Palette

## Suggested Readings by Readers

- **What is Mathematics** by **Richard Courant, Herbert Robbins, Ian Stewart**
  This book presents mathematics as a unified, intuitive, and creative science, rooted in both logical rigor and real-world problems. The book can be enjoyed by anybody looking to understand the essence of mathematics as a rich, intuitive, multifaceted subject. The book describes various number systems, algebraic and transcendental numbers, leading up to constructions in geometry and constructible numbers. It goes on to introduce affine and projective geometry, topology, and calculus in detail. The book gives precise definitions and wonderfully demonstrates various concepts in higher mathematics using the simplest non-trivial examples, while assuming little to no prerequisites on the part of the reader.

- **Physics for Entertainment**, **Books One and Two** by **Yakov Perelman**
  This is a popular science book that describes a whole host of concepts for school students. The topics range from kinematics, mechanics, and gravitation to heat, light, sound, and electromagnetism. These ideas are explained through a variety of experiments and historical anecdotes. The book, with its charismatic style of introducing new topics in science, can be enjoyed by readers of all ages and skill levels, regardless of how experienced they are with physics. The non-technical flavour of the book, however, never impinges on its accuracy. The same enthusiasm is deeply ingrained in many other works of the author, *Arithmetic for entertainment*, *Mechanics for entertainment*, *Geometry for Entertainment*, *Astronomy for entertainment*, and *Mathematics can be fun* to name a few.

- **A Mathematician's Lament** by **Paul Lockhart**
  In this book, *Lockhart* laments the loss of the soul of mathematics. He critiques how the subject, as taught in schools, is stripped of its life and reduced to a rote, hollow, procedural, and often robotic method of learning. He argues that mathematics is an art form that can be as evocative as music, but is seen as nothing more than a tool or a requirement for a resume. Throughout the entire book he makes an honest attempt to champion his point that by forcing students to memorize formulas without ever experiencing the joy of discovery, we are "destroying the very thing we claim to be teaching."

- **Murder in the Cathedral** by **T.S. Eliot**
  A drama in verses written by T.S. Eliot, which goes through the event of the assassination of Archbishop Thomas Becket in Canterbury Cathedral during the reign of Henry II in 1170. The play is a blend of hope and hopelessness, of bravery and dread, of temptation and integrity, of faith and shock. The formal control of the theatrical turns one into a meditation on power, conscience, and temptation.

- **The Boy, the Mole, the Fox and the Horse** by **Charlie Mackesy**
  This book by *Mackesy* explores the themes of friendship, kindness, vulnerability, while emphasizing on the very necessary aspect of asking for help when needed. This is a short, reflective book which sits at the intersection of a fable and a sketchbook. The four characters, however highly unlikely to encounter each other in real life, exist in the same space and time, understanding each others sentiments and figuring out a way through life, each offering a different ingredient. The book offers the quiet and calm ambiance which adds to the reading experience. The lessons offered are certainly not 'ever heard of before', but the presentation seems to be more impactful. For those interested, a movie based on the book with the same name is also available.
- **And Every Morning the Way Home Gets Longer and Longer** by **Fredrik Backman**
  This short novella by *Backman* told through fragmented conversations spanning three generations. At its centre is a grandfather battling cognitive decline, striving to preserve his memories; his son, grappling with the slow, anticipatory loss of a parent; and a grandson attempting to understand a world quietly slipping away. The narrative captures their shared struggle to hold on to one another, each seeking, in their own way, a little more time. The inexplicable grief of loss is portrayed through fragments of time and memory, linking the past and the present. The book frames grief as an ongoing, lived experience, shaped by memory and time.
- **The Picture of Dorian Gray** by **Oscar Wilde**
  This is a philosophical novel that interrogates beauty, morality, and the consequences of aesthetic excess. Through Dorian's unaging body and corrupted portrait, *Wilde* externalizes the tension between appearance and ethical responsibility. Ultimately, the novel raises enduring questions about selfhood, influence, and accountability, presenting moral decay as a gradual, seductive process.

### Web Resources

- Suggested Readings for Probability Students by Manjunath Krishnapur
  https://math.iisc.ac.in/ manju/suggestedreading.html
- Rudra Veena hosted by Carsten Wicke
  https://www.Rudra Veena.net/
- GAP package for computations in Quivers and Path Algebra
  https://oyvinso.folk.ntnu.no/QPA/
- q.uiver.app–A modern commutative diagram editor for the web
  https://q.uiver.app/

- The Complete Palette Guide for Watercolors
  https://www.handprint.com/HP/WCL/palette1.html/
- Grothendieck Archives (Université de Montpellier)
  https://grothendieck.umontpellier.fr/archives-grothendieck/
- The On-Line Encyclopedia of Integer Sequences
  https://oeis.org/
- The Stacks Project
  https://stacks.math.columbia.edu/
- Simons Center for Geometry and Physics Video Portal on Mathematics and Physics
  https://scgp.stonybrook.edu/video_portal/
- Gudhi: A Library for Topological Data Analysis
  https://gudhi.inria.fr/

### Upcoming Conferences and Programs

- Upcoming conferences in algebraic geometry maintained by Ravi Vakil
  https://virtualmath1.stanford.edu/ vakil/conferences.html
- **Millennium Prize Problems Lecture Series** (Sept 17, 2025 - Apr 15, 2026) at Harvard Science Center, Harvard University.
  https://cmsa.fas.harvard.edu/millennium/
- **Thematic Programme on Rational Points, Algebraic Cycles and the Local-Global Principle** (Jan 2026 - May 2026) at LMSI, Mumbai.
  https://lmsi.org/programmes/thematic-programme-on-rational-points/
- **Generalised symmetries and anomalies in quantum phases of matter** (Jan 05, 2026 - Jan 16, 2026) at ICTS, Bangalore.
  https://www.icts.res.in/program/GSYQM2026
- **Partial Differential Equations, Analysis and Geometry** (Jan 12, 2025 - Jan 16, 2025) at IHES.
  https://indico.math.cnrs.fr/event/15217/
- **Geometric Analysis and PDE** (Feb 02, 2026 - Feb 13, 2026) at ICTS, Bangalore.
  https://www.lptms.universite-paris-saclay.fr/leshouches2025/
- **IMSc Spring School on High Energy Physics** (Feb 24, 2025 to Mar 7, 2025) at IMSc, Chennai.
  https://indico.imsc.res.in/event/5/

- **Spring School on Superstring Theory and Related Topics** (Mar 23, 2026 - Mar 31, 2026) at ICTP.
  https://indico.ictp.it/event/11135
- **From Hochschild Homology to Topological Hochschild Homology** (May 25, 2026 - Jun 05, 2026) at ICTS, Bangalore.
  https://www.mpim-bonn.mpg.de/maninmemorial
- **Thematic Programme on Surface Group Representation and Analytic Group Theory** (Jul 1, 2026 to Dec 18, 2026) at LMSI, Mumbai.
  https://lmsi.org/programmes/thematic-programme-on-surface-analytics-group/
- **Strings 2026** (Jul 06, 2026 - Jul 10, 2026) at SIMIS, Shanghai, China .
  https://strings2026.simis.cn/
- **2026 IHES Summer School - Cosmological Correlators** (Jul 06, 2026 - Jul 17, 2026) at IHES.
  https://indico.math.cnrs.fr/event/15597/
- **International Congress of Mathematicians (ICM) 2026** (Jul 23, 2026 - Jul 30, 2026) in Philadelphia, USA.
  https://www.icm2026.org/