

# MA 322: Scientific Computing



*Department of Mathematics*  
*Indian Institute of Technology Guwahati*

January 31, 2023

---

## CHAPTER 3: INTERPOLATION

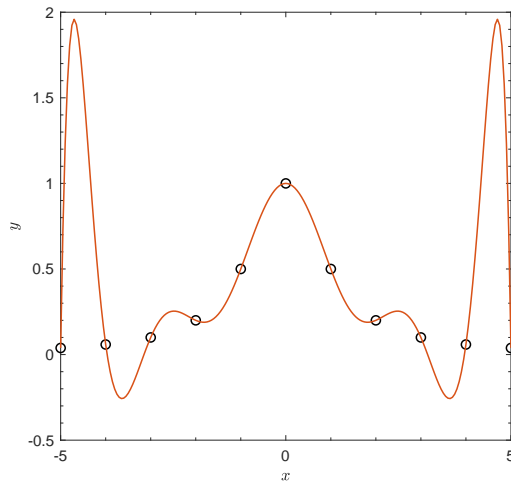
# Piecewise polynomial interpolation

---

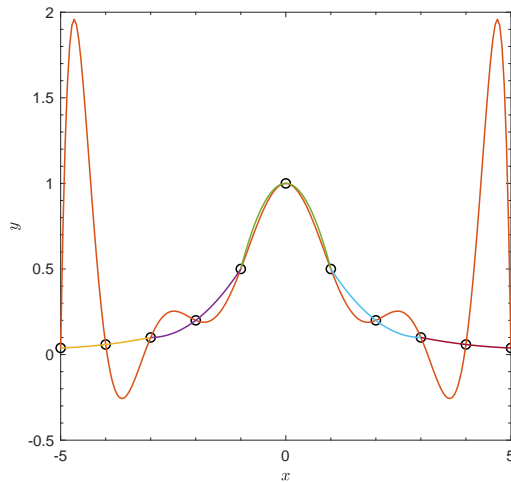
$x$	-5	-4	-3	-2	-1	0	1	2	3	4	5
$f(x)$	0.0385	0.0588	0.1	0.2	0.5	1	0.5	0.2	0.1	0.0588	0.0385

# Piecewise polynomial interpolation: Graphical representation

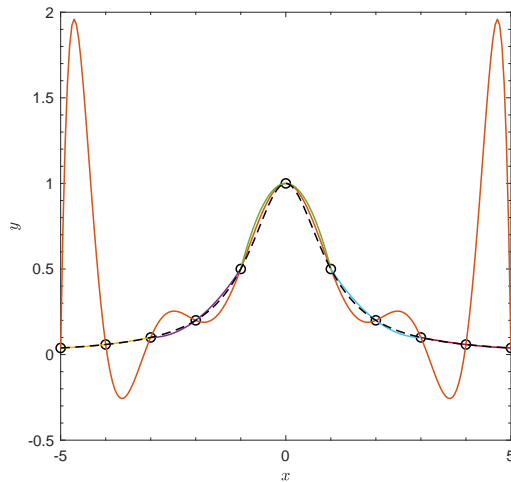
---



# Piecewise polynomial interpolation: Graphical representation



# Piecewise polynomial interpolation: Graphical representation



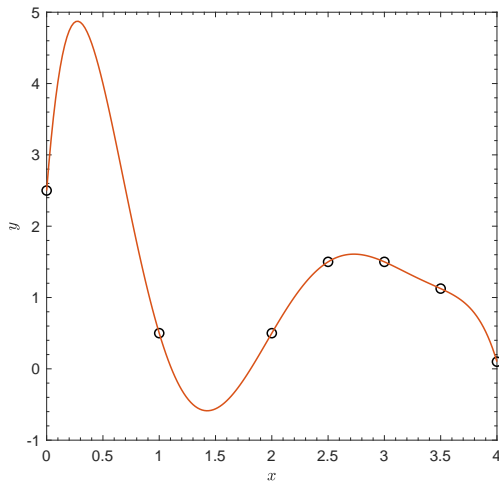
# Piecewise polynomial interpolation

---

$x$	0	1	2	2.5	5	3.5	4
$f(x)$	2.5	0.5	0.5	1.5	1.5	1.125	0.1

# Piecewise polynomial interpolation: Graphical representation

---





# Piecewise polynomial interpolation: Graphical representation

