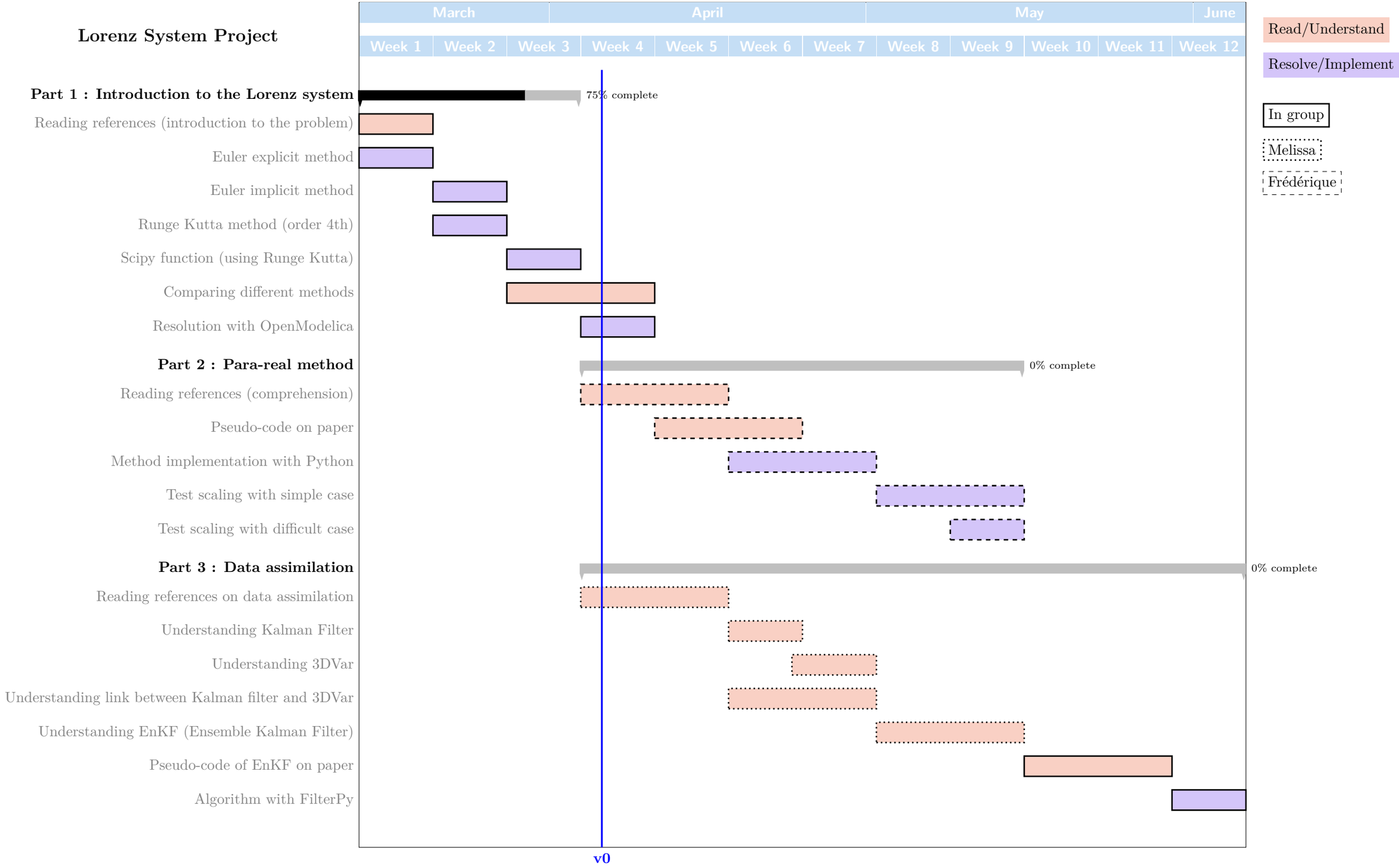
Lorenz System Project
March
April
May
June
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Read/Understand
Resolve/Implement
In group
Melissa
Frédérique
Part 1 : Introduction to the Lorenz system
75% complete
Reading references (introduction to the problem)
Euler explicit method
Euler implicit method
Runge Kutta method (order 4th)
Scipy function (using Runge Kutta)
Comparing different methods
Resolution with OpenModelica
Part 2 : Para-real method
0% complete
Reading references (comprehension)
Pseudo-code on paper
Method implementation with Python
Test scaling with simple case
Test scaling with difficult case
Part 3 : Data assimilation
0% complete
Reading references on data assimilation
Understanding Kalman Filter
Understanding 3DVar
Understanding link between Kalman filter and 3DVar
Understanding EnKF (Ensemble Kalman Filter)
Pseudo-code of EnKF on paper
Algorithm with FilterPy
v0