



## **NPTEL ONLINE CERTIFICATION COURSES**

**Course Name: Deep Learning**

**Faculty Name: Prof. P. K. Biswas**

**Department : E & ECE, IIT Kharagpur**

**Topic**

**Lecture 10: Linear Classifier**

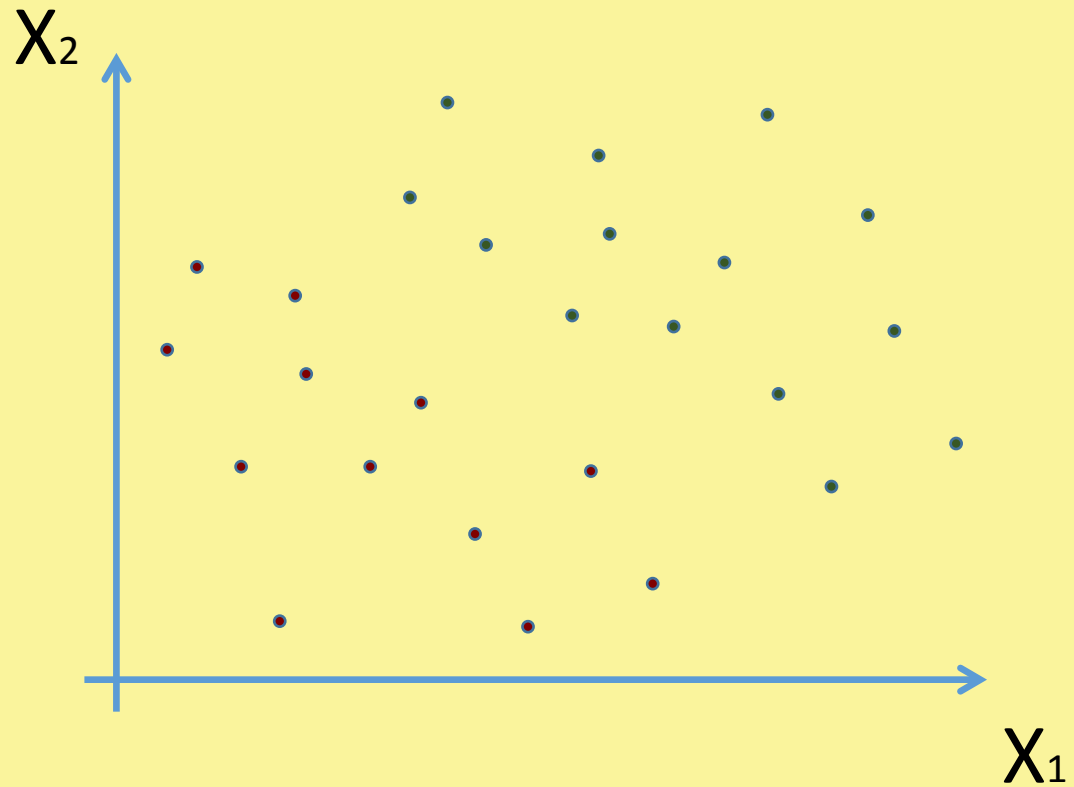
## CONCEPTS COVERED

### Concepts Covered:

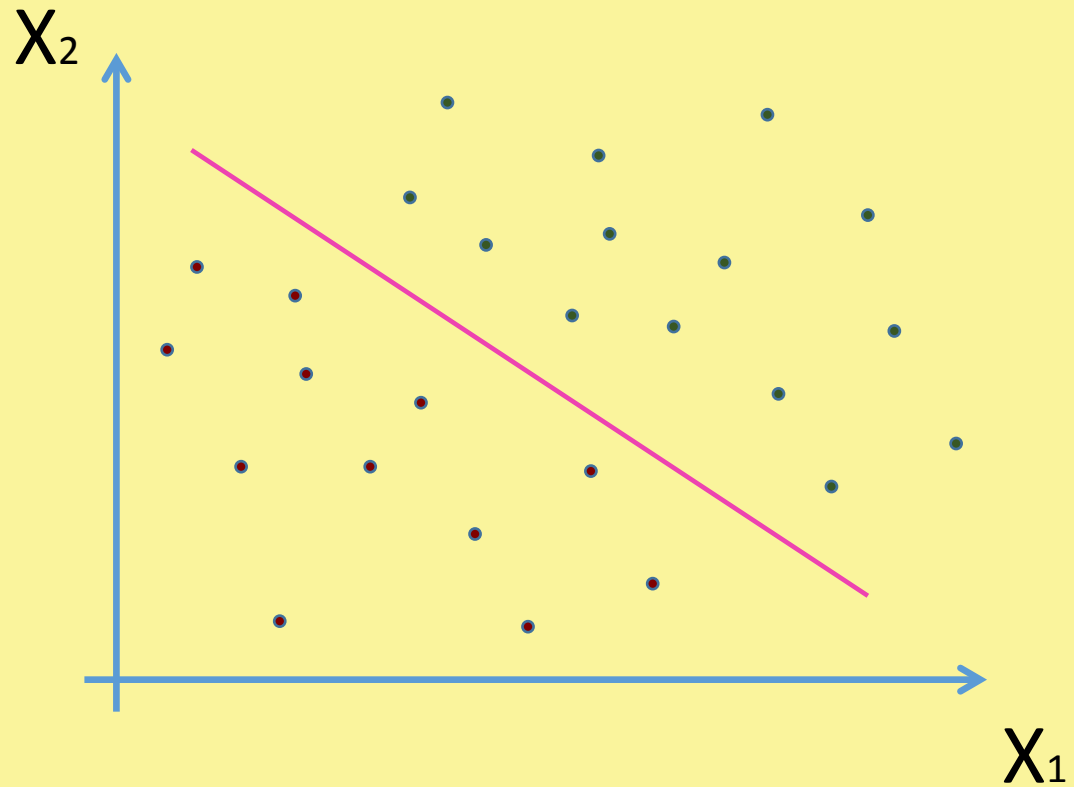
- ❑ Discriminant Function and Decision Boundary
- ❑ Nearest Neighbour and k-NN Classifier
- ❑ Linear Classifier
- ❑ Support Vector Machine (SVM)



# Linear Classifier – 2 Class Problem



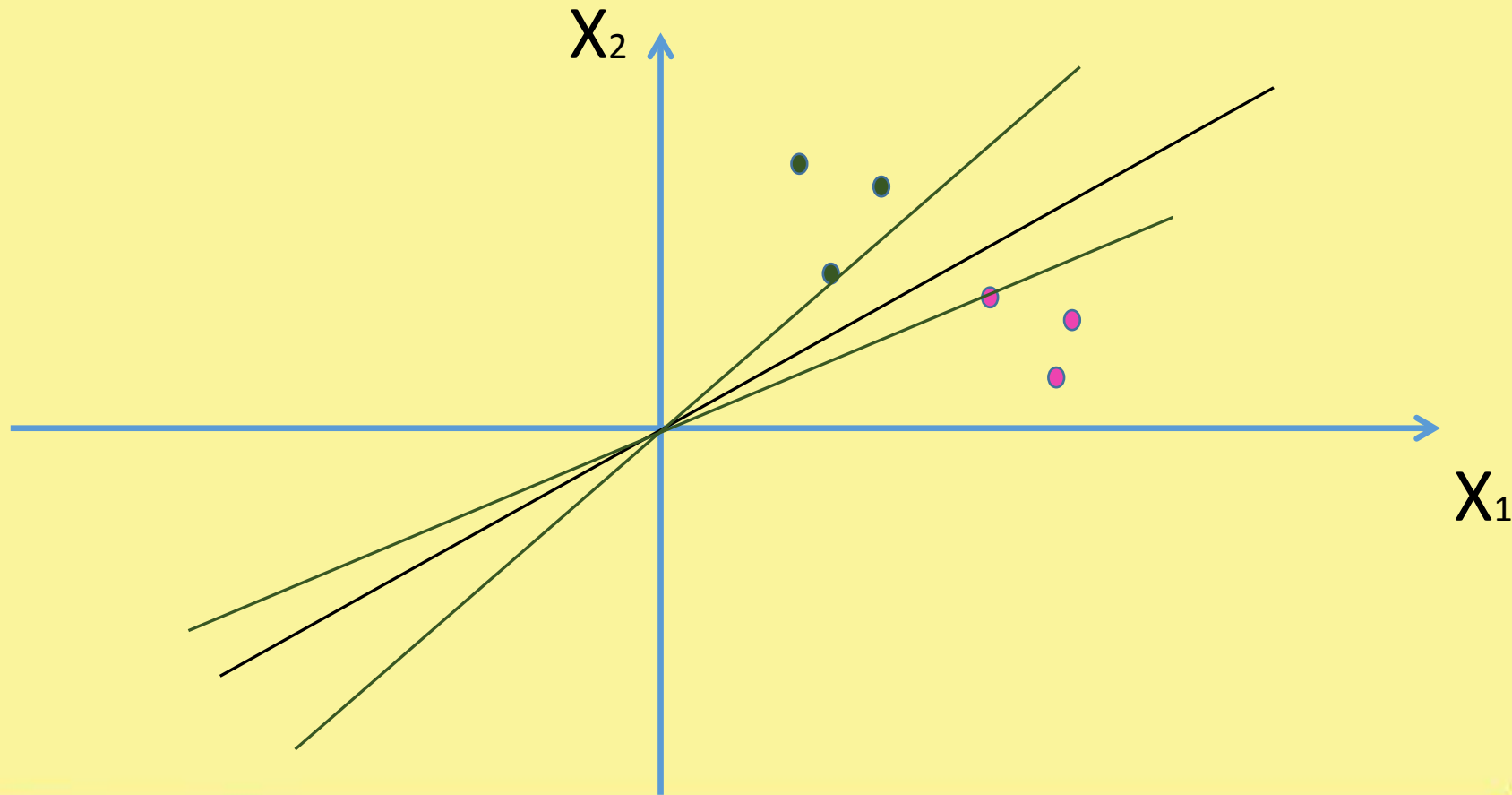
# Linear Classifier – 2 Class Problem



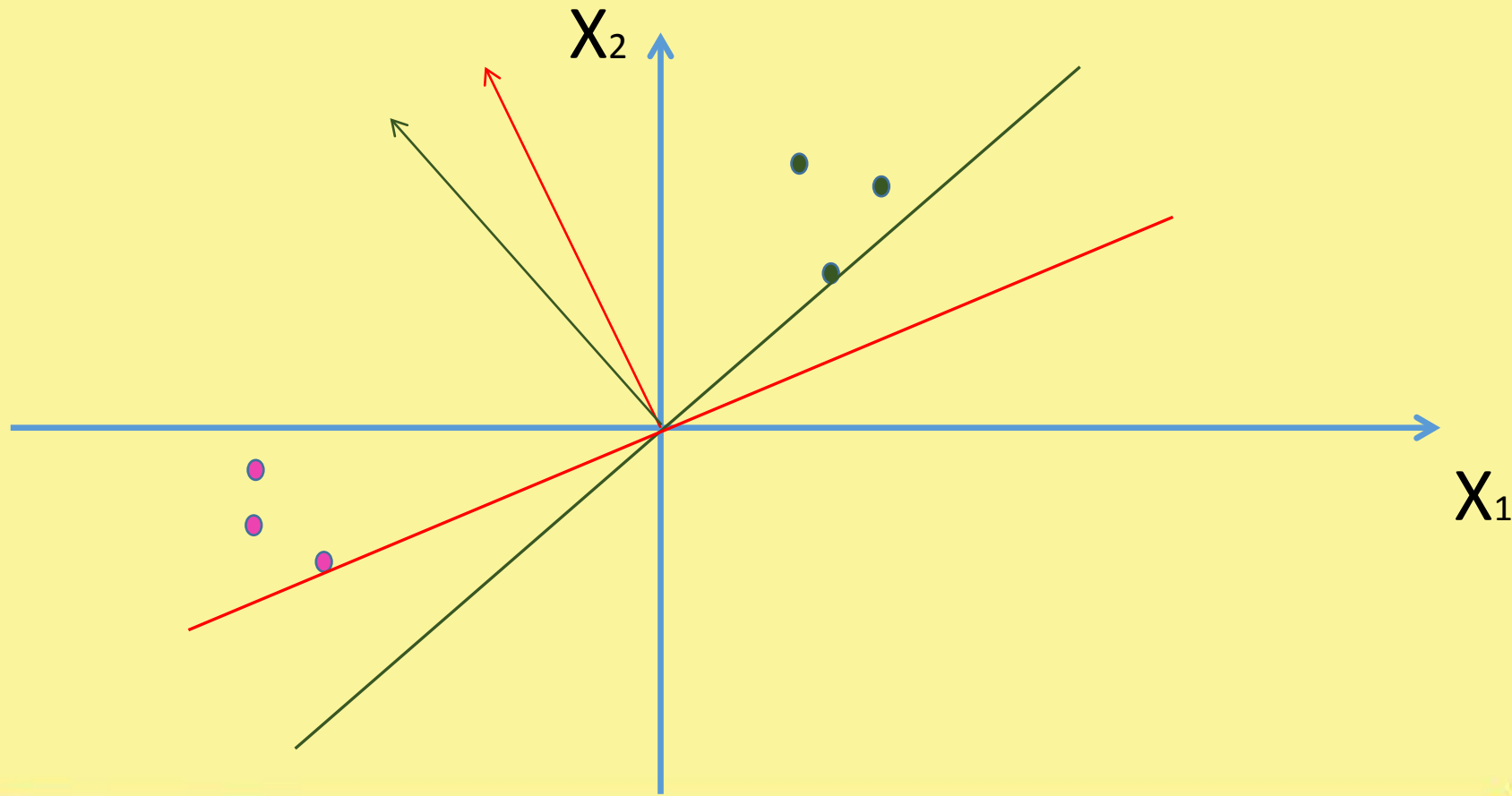
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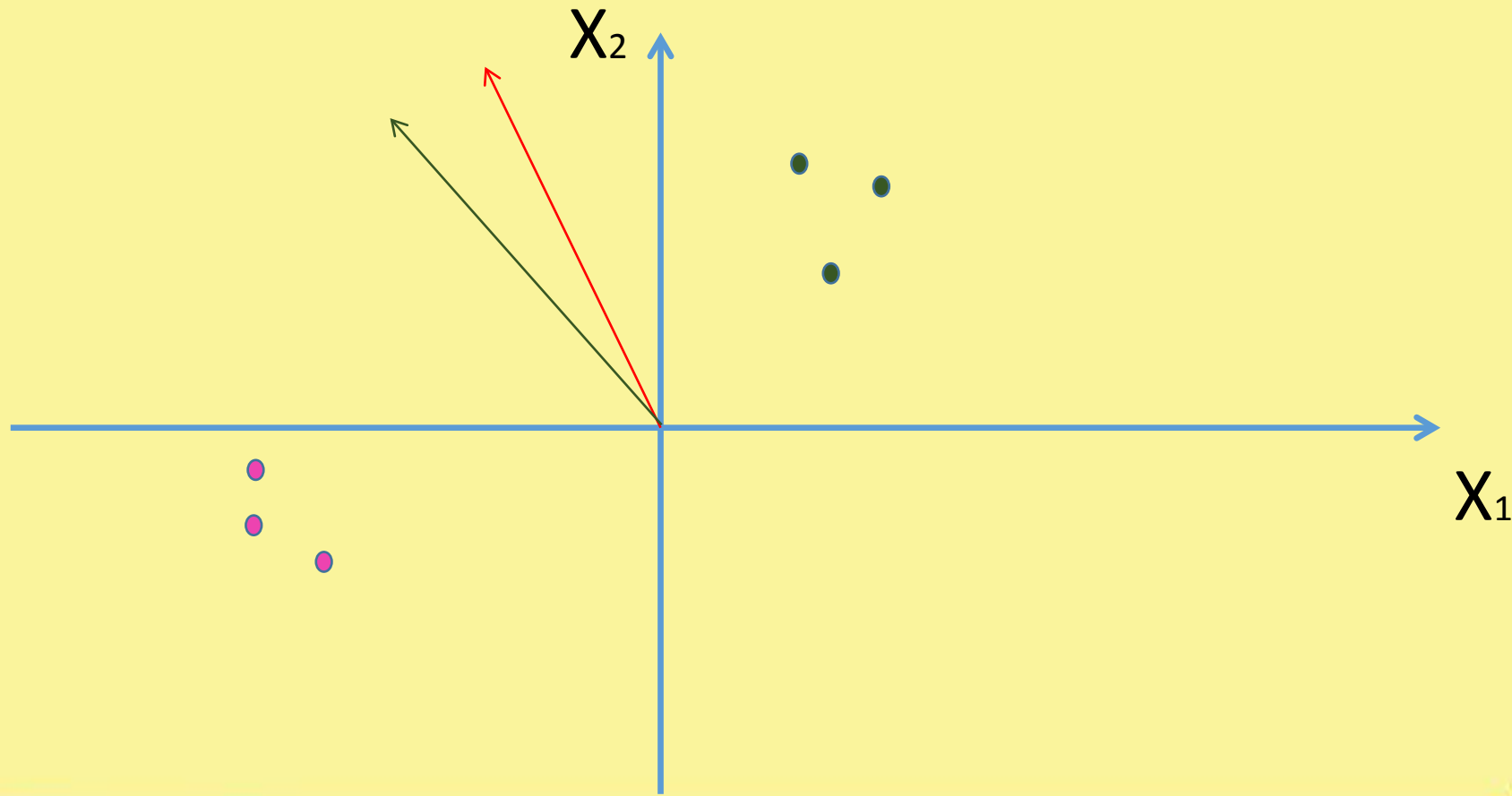


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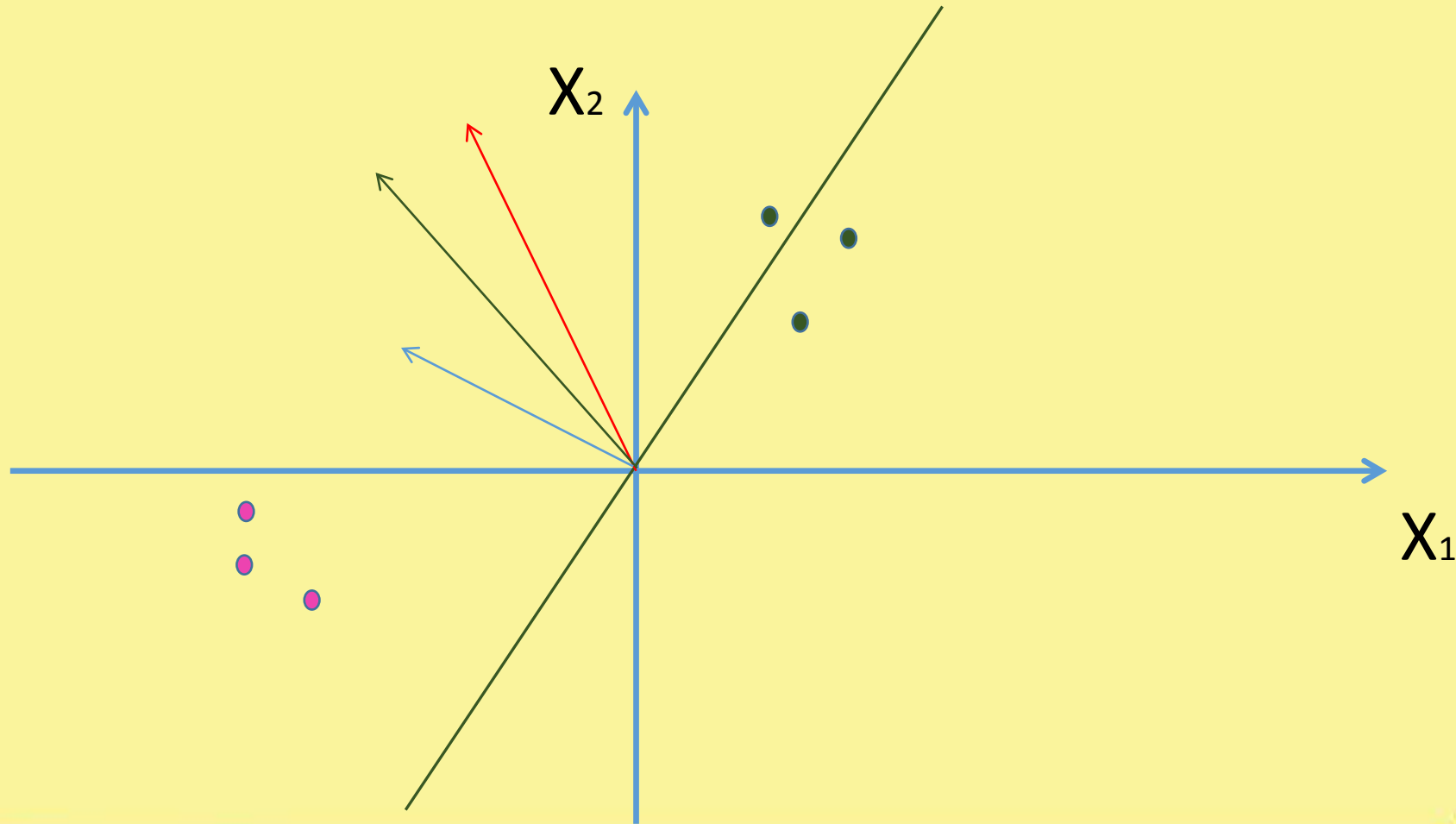




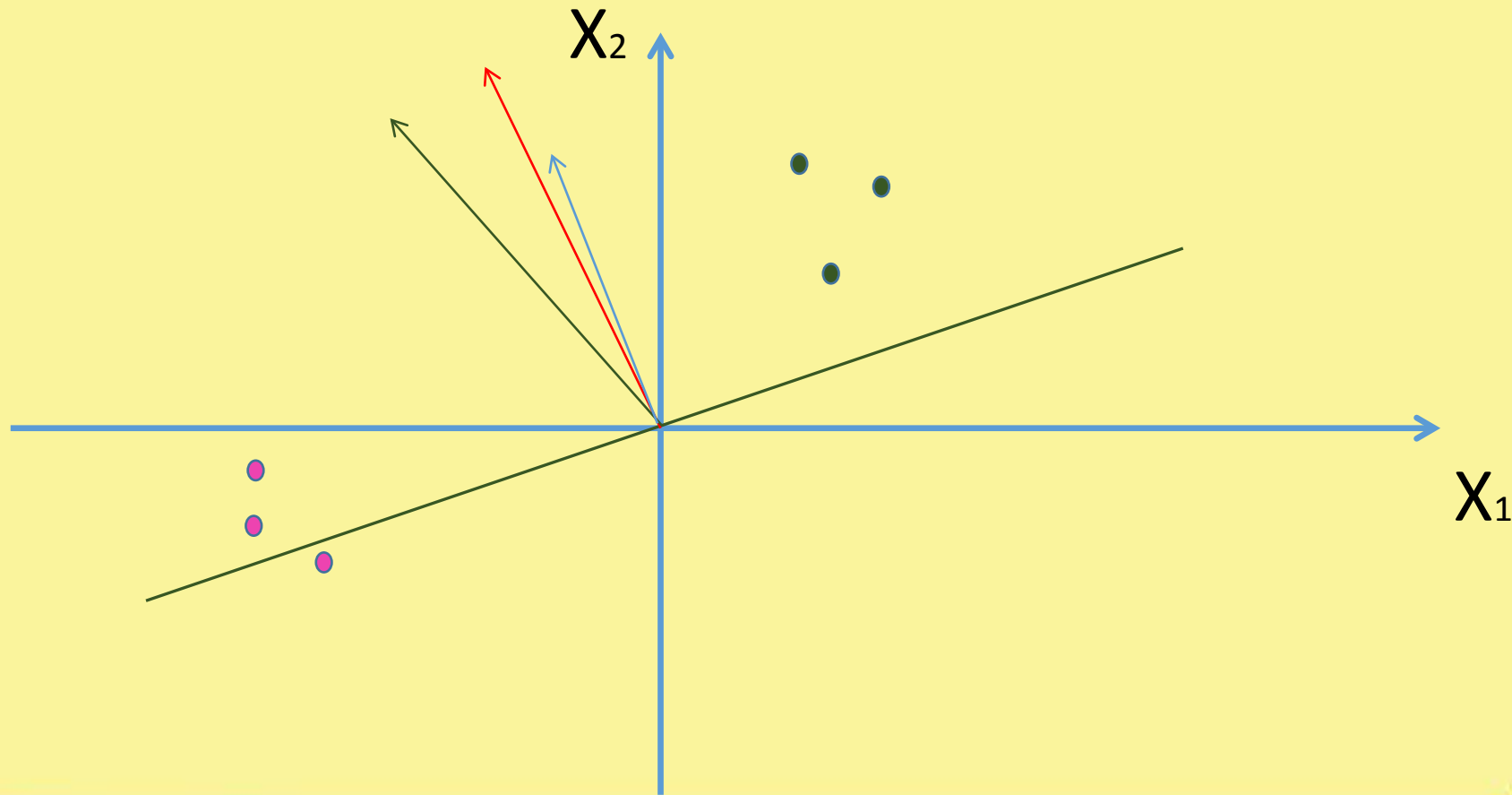
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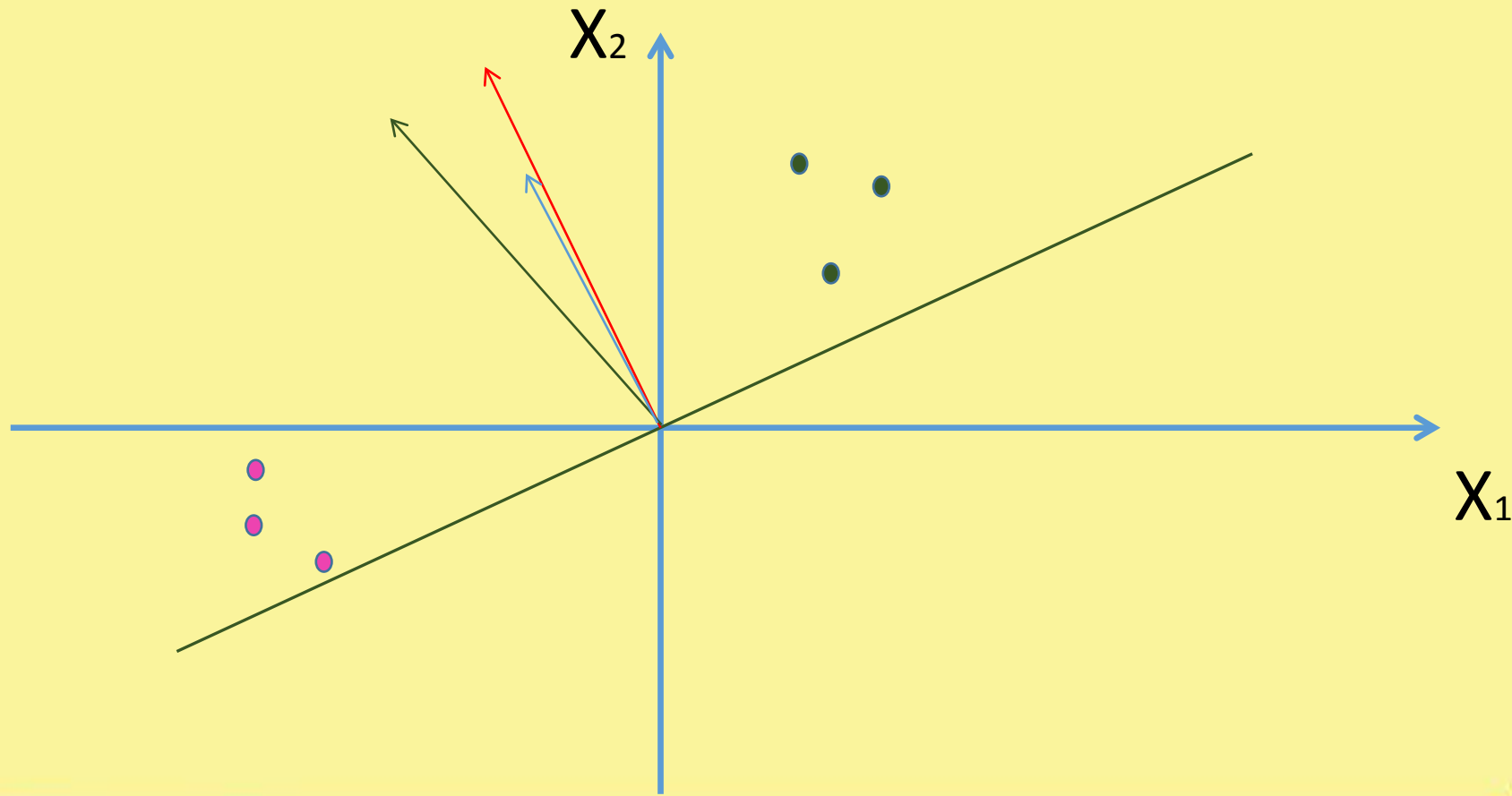
# Linear Classifier – 2 Class Problem



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# Linear Classifier – 2 Class Problem





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*Thank  
you*

