



IIT KHARAGPUR



NPTEL ONLINE
CERTIFICATION COURSES

COMPUTER NETWORKS AND INTERNET PROTOCOLS

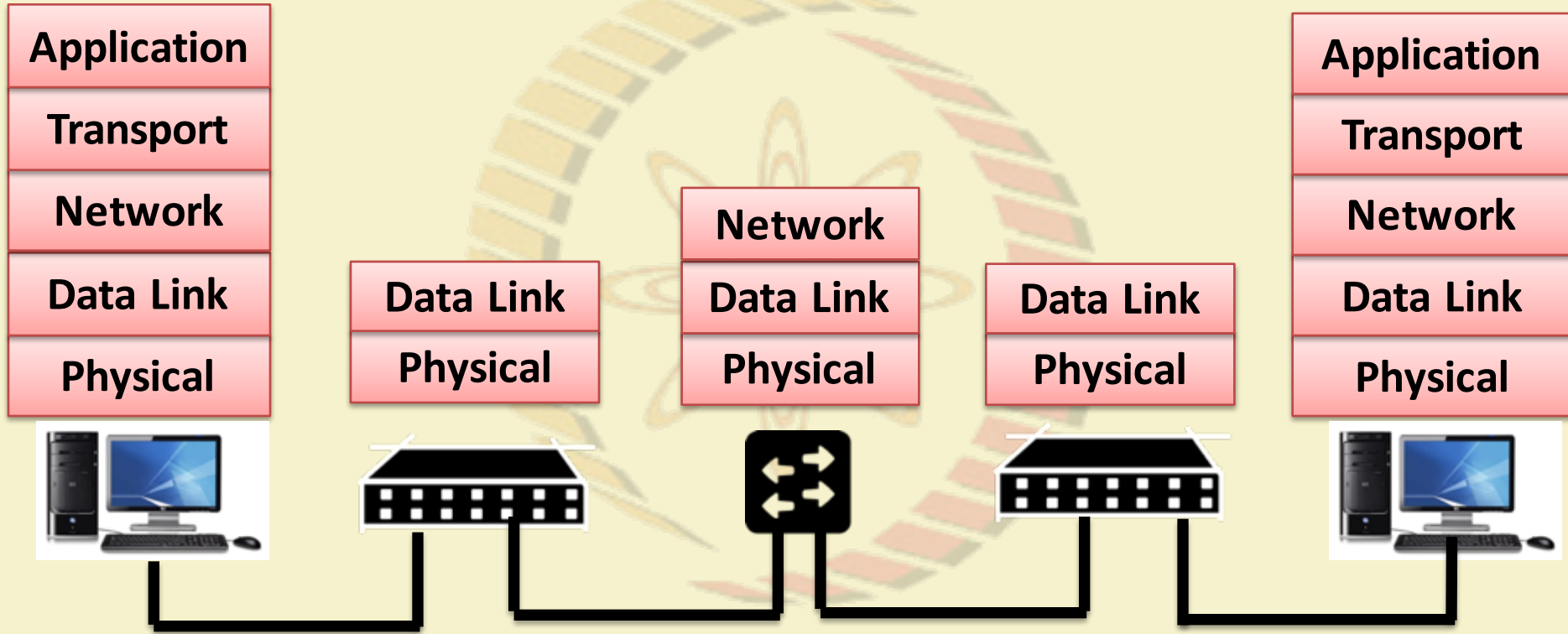
SOUMYA K GHOSH

COMPUTER SCIENCE AND ENGINEERING,
IIT KHARAGPUR

SANDIP CHAKRABORTY

COMPUTER SCIENCE AND ENGINEERING,
IIT KHARAGPUR

Transport Layer - I (Services)



Protocol Stack Implementation in a Host

Application

Transport

Network

Data Link

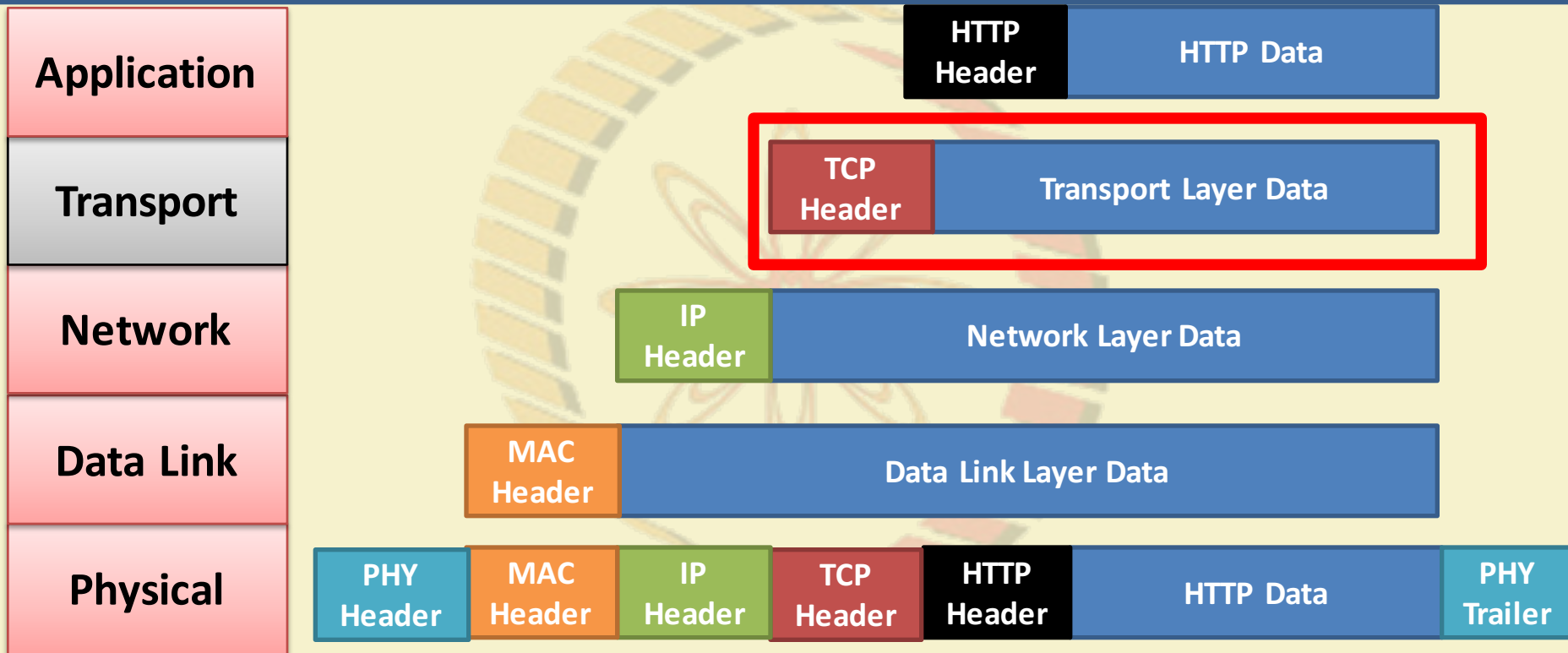
Physical

Software, Kernel

Firmware, Device Driver

Hardware

How Application Data Passes Through Different Layers



Transport Layer Services

End to end
packet delivery

Connection
Establishment

Reliable Data
Delivery

Flow and
Congestion
Control

Ordered Packet
Delivery

UDP

Transport

TCP

Datagram delivery (unreliable)

Network



thank you!

