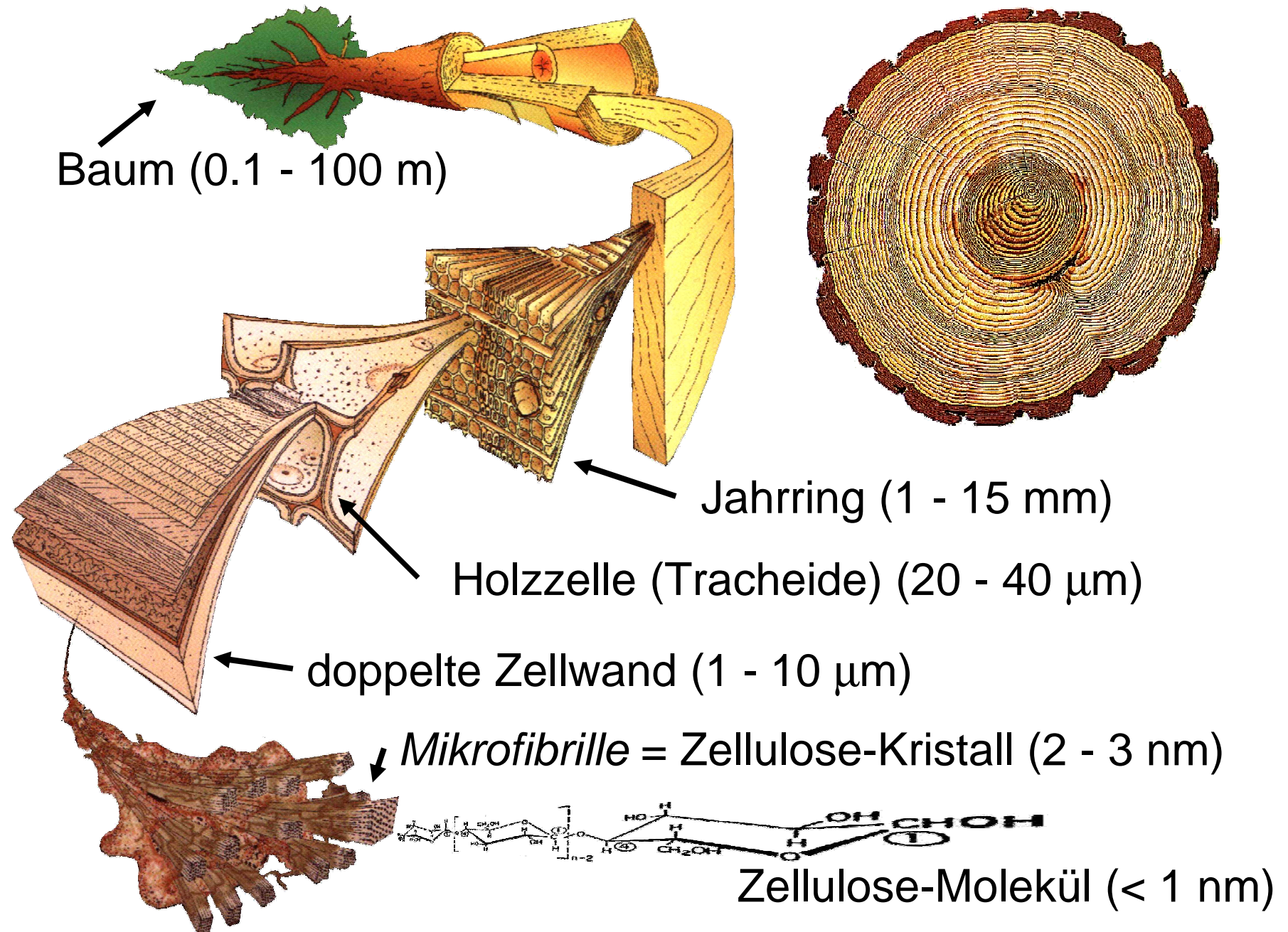
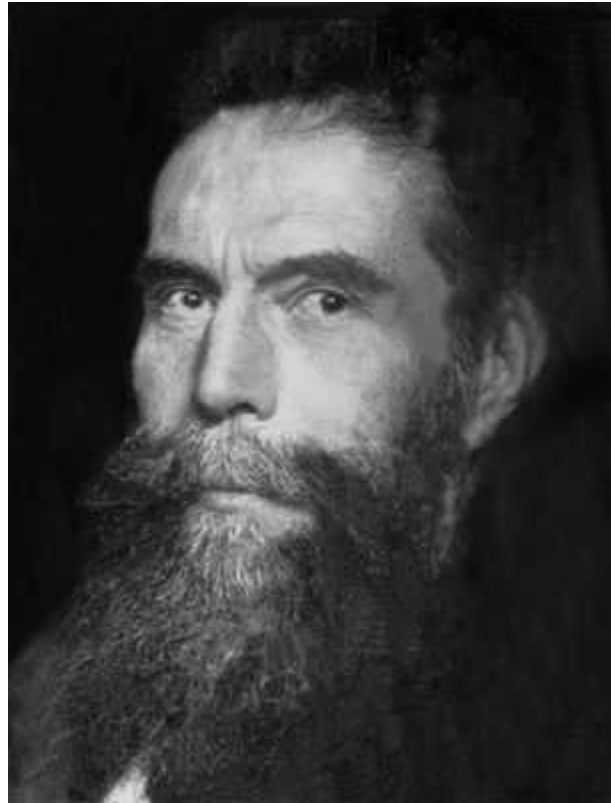


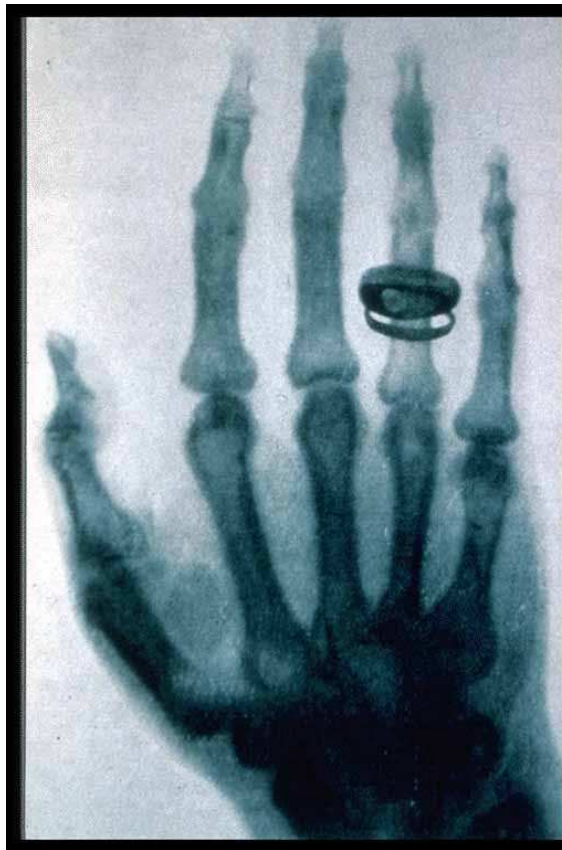
# Hierarchische Struktur eines Nadelbaums



# Wilhelm Conrad Röntgen (1845-1923)



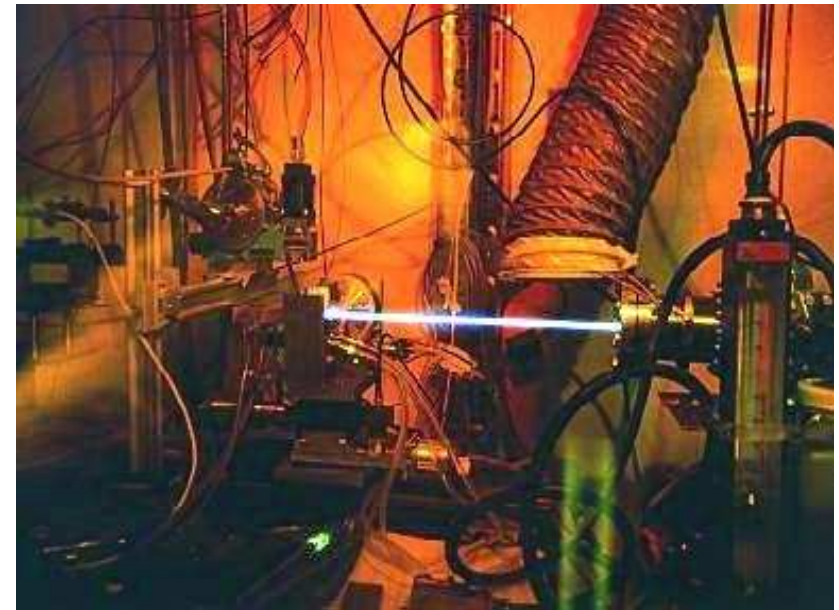
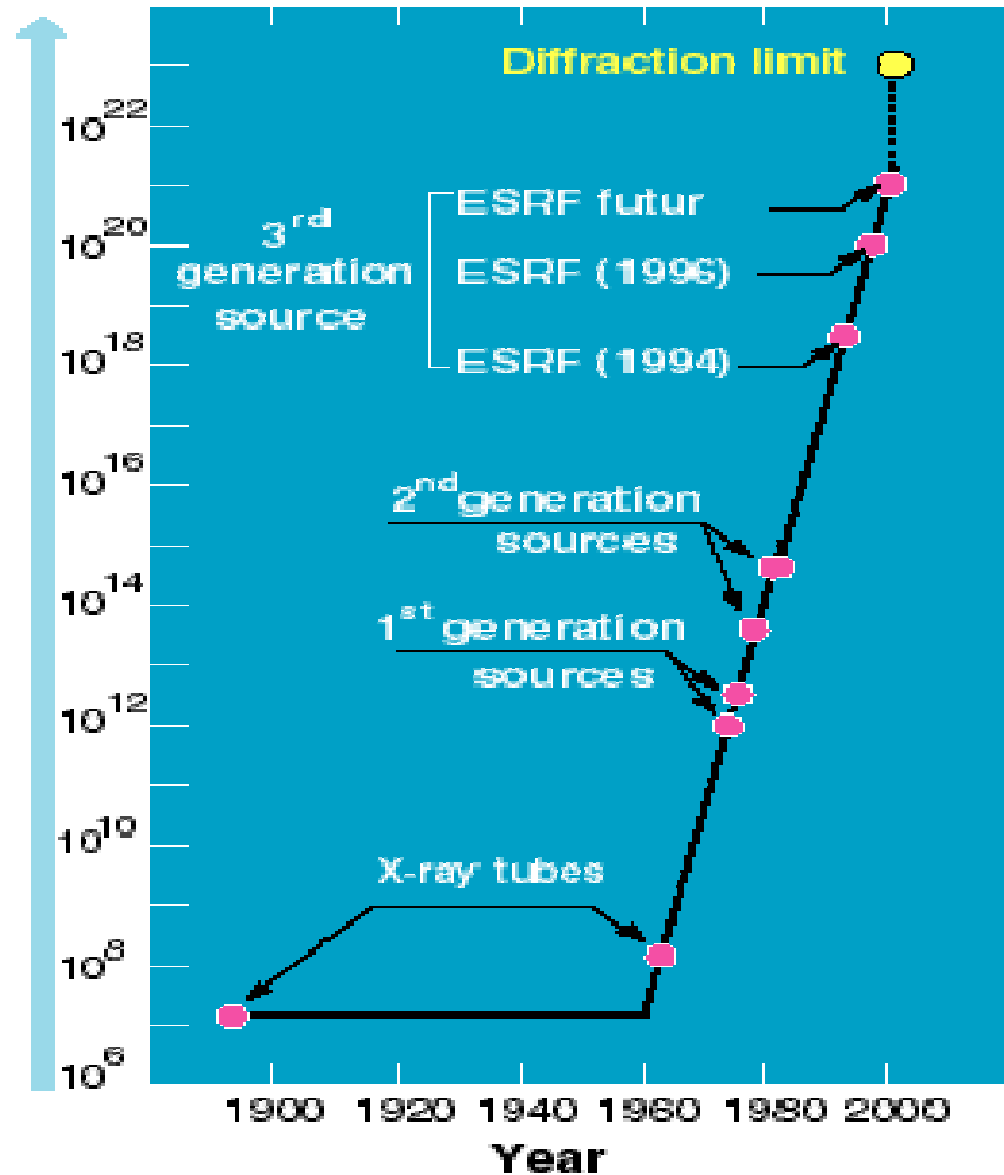
Hand von Röntgens  
Frau (23.01.1896)



Max von Laues  
Röntgenröhre

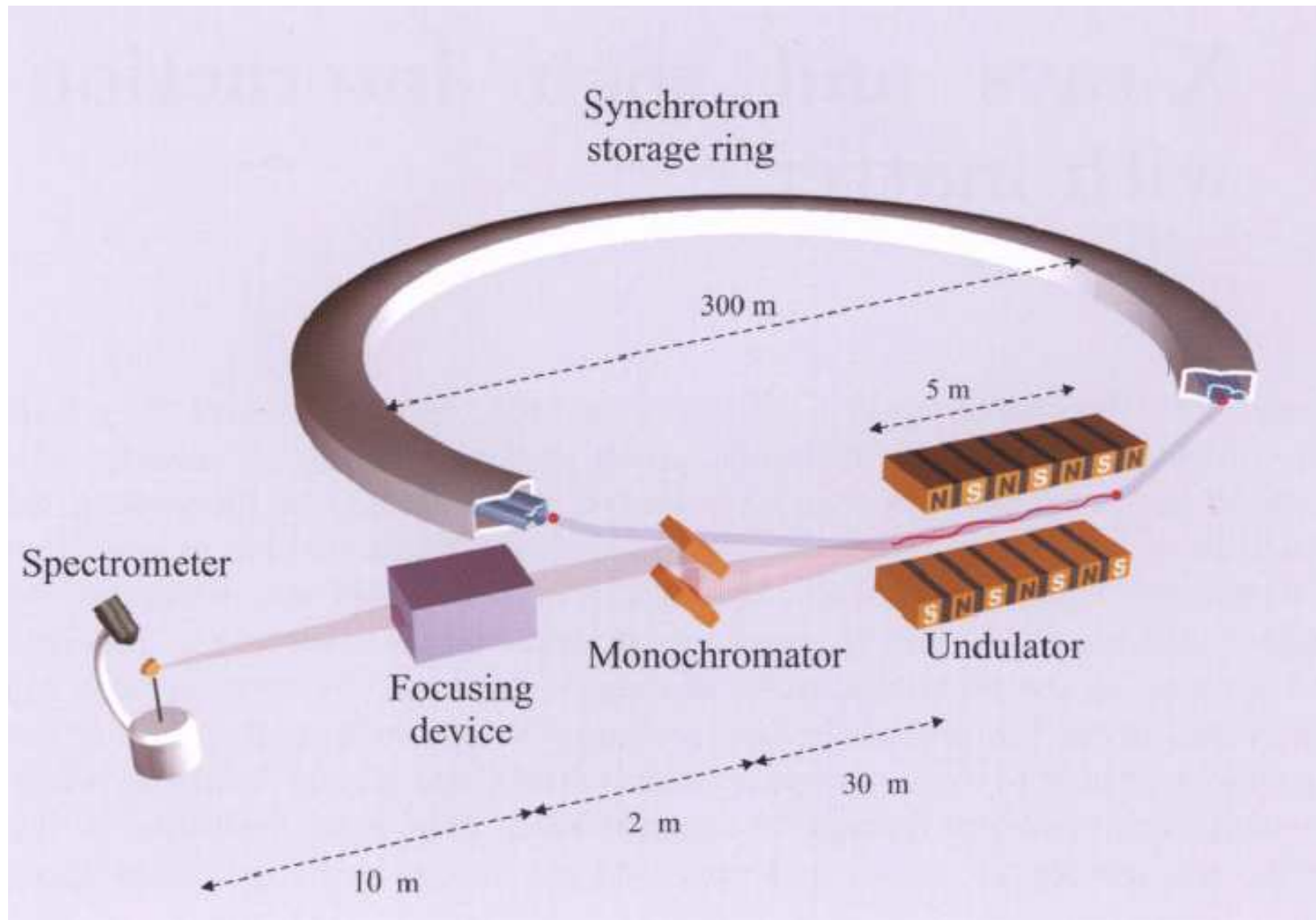
# Synchrotronstrahlung

Brilliance of the X-ray beams  
( photons / s / mm<sup>2</sup> / mrad<sup>2</sup> / 0.1% BW )





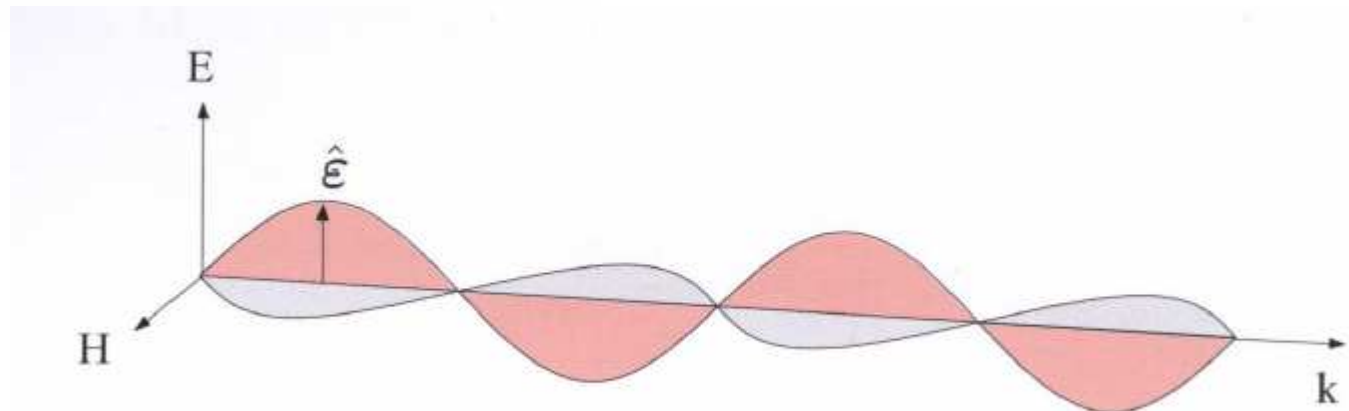
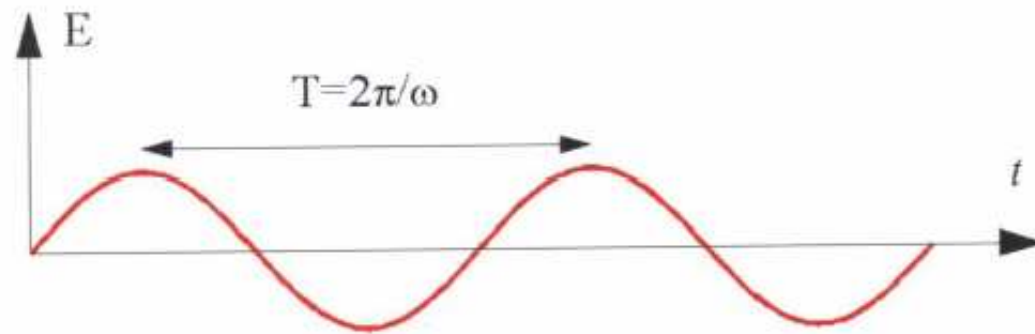
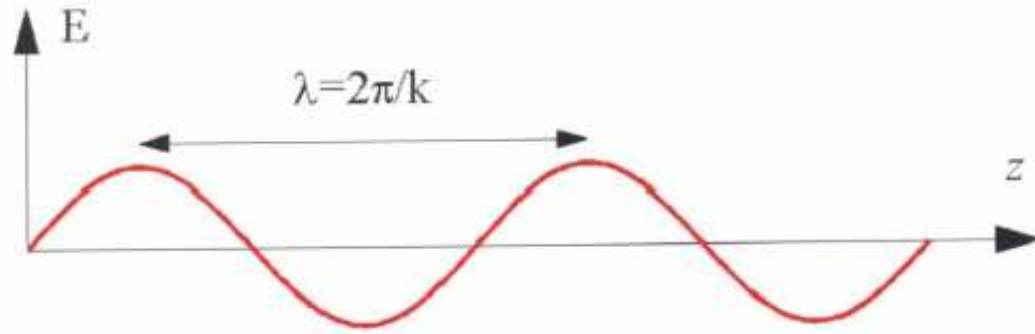
# Schematischer Aufbau einer Synchrotronstrahlungsquelle der 3. Generation





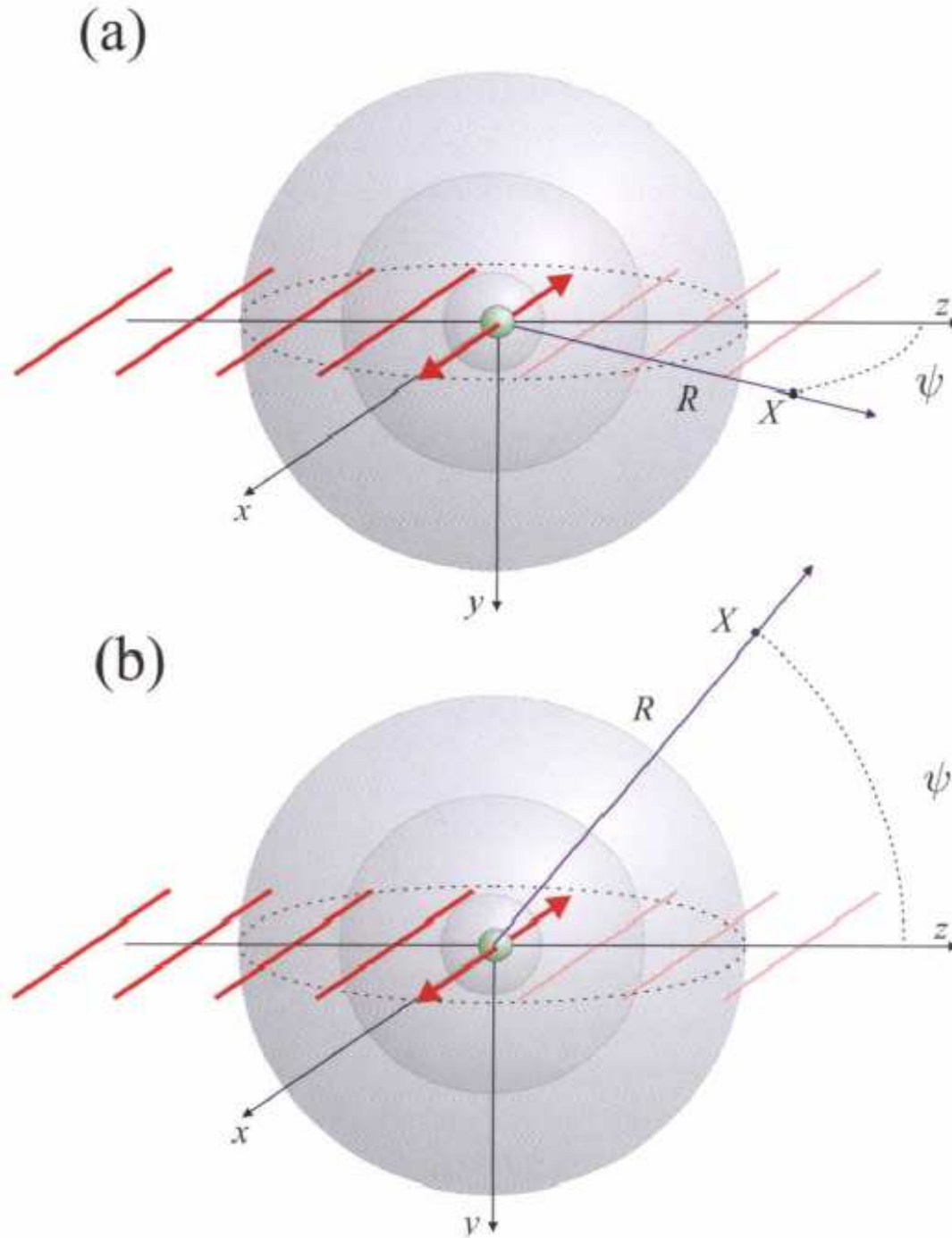
European Synchrotron Radiation Facility  
Grenoble (France):  $E = 6 \text{ GeV}$ ,  $U = 844 \text{ m}$

# Röntgenstrahlung als elektromagnetische Transversalwelle





# Streuung von Röntgenstrahlung an einem Elektron (klassisch)



# Röntgenstreuung an einem Atom

