

**Vibration Theory**  
**Prof. Dr.-Ing. E. Kreuzer**

**Knowledge Test - Questions**

1. Which are the elements of the absolute acceleration of one point, whose movements are observed from a moved reference system?
2. Why can't a diver jumping from a diving platform make a somersault forward after a somersault backward during the fall?
3. Why does a hollow cylinder roll more slowly than a solid cylinder of same radius and the same mass down an inclined plane?
4. Why does a stone thrown perpendicularly upward fall down at the equator noticeable west of the discharging point?
5. How is the mode of motion of the two natural oscillations of an oscillator with two degrees of freedom characterized?