



Selected topics in guided wave propagation for damage detection

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Topics:

1. Theory of elastic waves
 - 1.1. Waves in infinite media
 - 1.2. Guided waves
2. Elastic waves in structural elements
 - 2.1. Axial waves in rods
 - 2.2. Flexural waves in beams
 - 2.3. In-plane waves in plates
 - 2.4. Flexural waves in plates
3. Modelling of wave propagation
 - 3.1. Finite element method
 - 3.2. Spectral element method
4. Measurements of wave propagation
 - 4.1. Wave generation methods
 - 4.2. Wave registration methods
5. Damage detection of steel structures by wave propagation
 - 5.1. Damage detection in bars
 - 5.2. Damage detection in frame structures
 - 5.3. Damage detection in plate structures
6. Damage detection of concrete structures by wave propagation
 - 6.1. Impact-echo method
 - 6.2. Monitoring of damage evolution in concrete

TERMINY WYKLADÓW			
Data	Dzień tygodnia	Godzina	Sala*
2014-12-04	Cz	16.15-20.00	GG 162
2014-12-05	Pt	16.15-20.00	GG 162
2014-12-11	Cz	16.15-20.00	GG 162
2014-12-12	Pt	16.15-19.00	GG 162

^{*)} sala zostanie potwierdzona