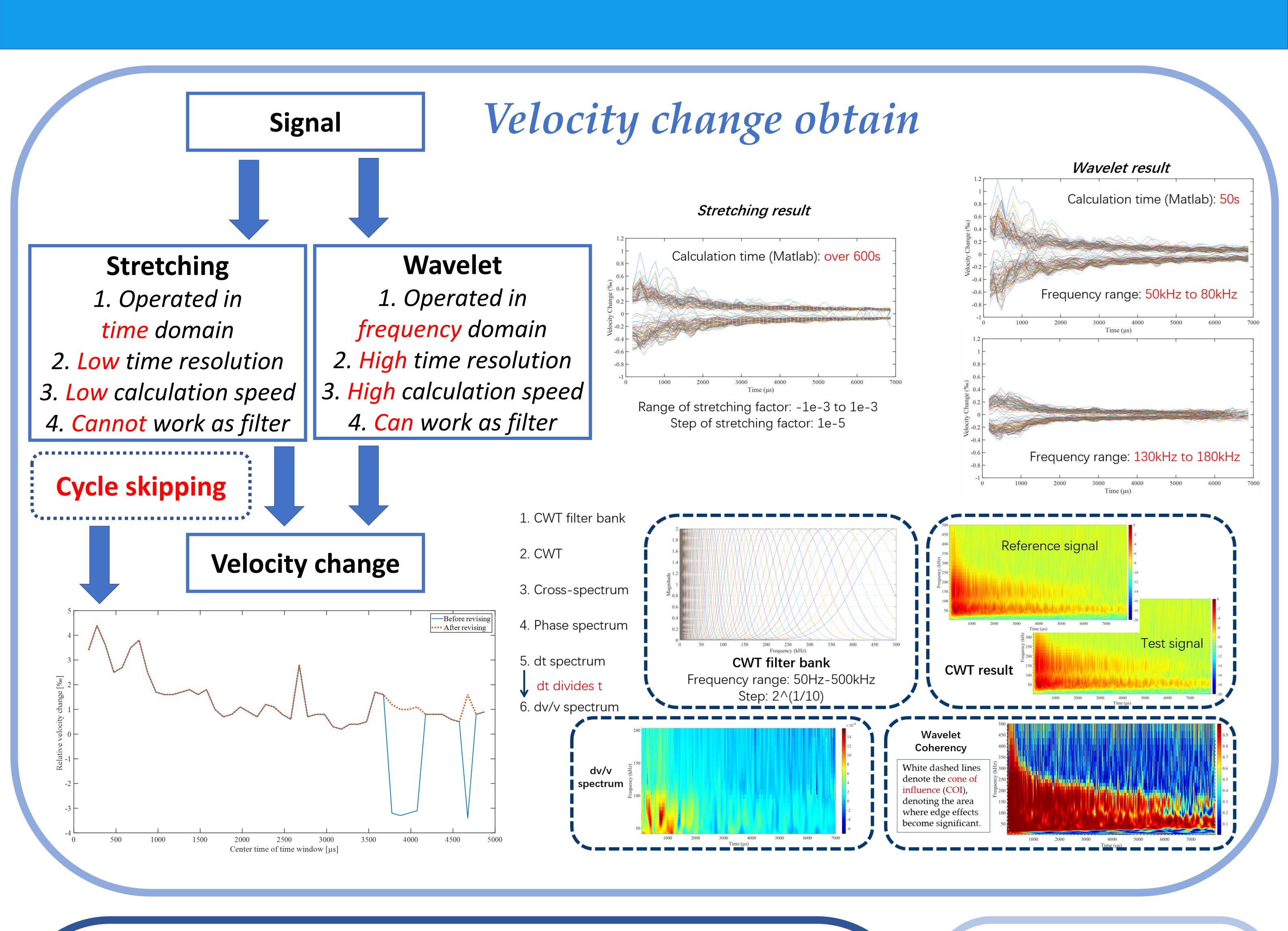
Structural Health Monitoring of Concrete Bridges using Smart Aggregates and Coda Wave Interferometry



From velocity change to stress distribution $2l + \lambda + \frac{\lambda + \mu}{2} (4\lambda + 4m + 10\mu)$ $2(3\lambda+2\mu)(\lambda+2\mu)$ Velocity change $2l + \lambda - \frac{\lambda}{2\mu} (4\lambda + 4m + 10\mu)$ $2(3\lambda+2\mu)(\lambda+2\mu)$ Acoustoelastic theory **Stress** Sensitivity kernel Acoustoelastic parameters: July 9th -Acoustoelastic parameters: August 19th Correlation coefficients: July 9th -Correlation coefficients: August 19th Stress field Time [ms]

Smart Aggregate

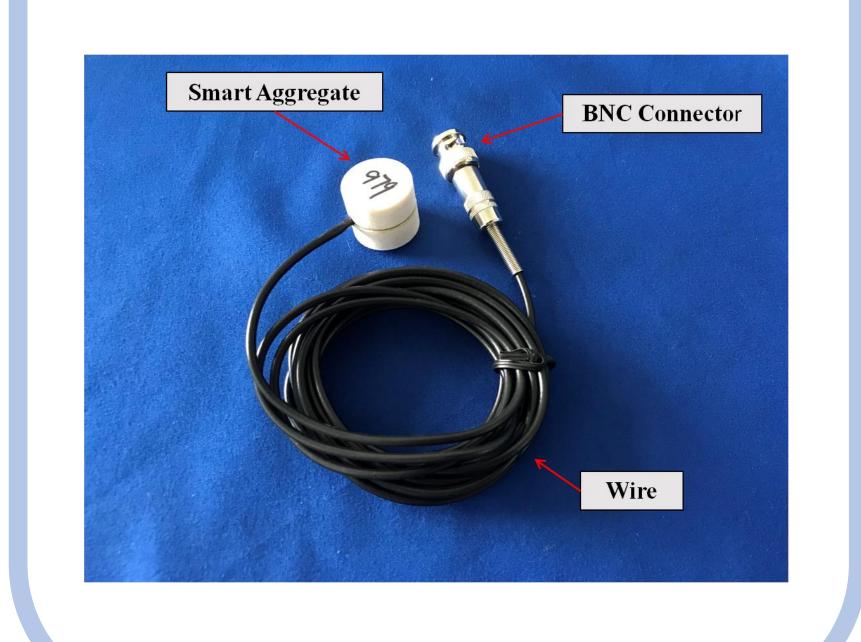
Keywords

Piezoelectric sensor

Dual-sensing

Low cost

Robust coupling



TUDelft concrete structures

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