Practical Course on Market Microstructure in R

<table>
<tr><td>Unit Title</td><td colspan="3">Practical Course on Market Microstructure in R</td></tr>
<tr><td>Level of Study</td><td colspan="3">MA</td></tr>
<tr><td>Credit Value</td><td></td><td>ECTS Value</td><td></td></tr>
<tr><td>Home Department</td><td colspan="3">Mathematical methods in economics</td></tr>
<tr><td>Home Faculty</td><td colspan="3">Economics</td></tr>
<tr><td>Unit Co-ordinator</td><td colspan="3"></td></tr>
<tr><td>Key Words</td><td colspan="3">Market microstructure, Continuous Double Auction, R, Liquidity, Stylized facts</td></tr>
<tr><td>Brief Summary</td><td colspan="3">This is a practical unit that enables students to synthesise theoretical knowledge on market microstructure with work on high-frequency data and asset pricing skills using R.</td></tr>
<tr><td>Indicative Content</td><td colspan="3">Basic methods working with R language
Data management in R
Financial data sources in R
Working with L1 and L2 data in R
Working with Tradelog and Orderlog data in R
R packages for working with microstructure data
Models of Dealer Market
Models of Continuous Double Auction
Liquidity estimation in R
Detection of stylized facts
Empirical order flow characteristics
Transaction cost analysis for equity portfolio in R</td></tr>
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