

Quantifying the Air Quality In Hanoi

Using a Complex Temporal Network Approach

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Air pollution is an urgent issue in many developing countries. Over the last few years, air quality has deteriorated in big cities in Vietnam such as Hanoi and Ho Chi Minh City. This situation is worsen by the lack of comprehensive studies on air quality in Vietnam. In this talk, we would like to describe our work analyzing high-frequency time series data of pollutants such as PM₁, PM_{2.5}, PM₁₀, NO, NO₂, NO_x, SO₂, CO, along with environmental factors like wind speed, wind direction, temperature, relative humidity, barometer and radiation, using a complex temporal network approach. Our ultimate goal is to develop an air quality index for Hanoi.