

סמינר מדעי היסוד
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ד"ר יורי ברגמן
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Pattern Recognition in Seismology

תקציר

Seismic event detection and identification is the backbone of observational seismology. Its results are crucial not only for estimating seismic hazard and studying Earth's interior, but also for underground nuclear explosion monitoring. In this presentation I will speak about a seismic event pattern recognition method which is based on the transformation of raw 1-dimensional seismic signals into images in the time-frequency domain. Using this method we have identified the weak aftershocks that occurred after the Dead Sea earthquake with magnitude $ML=5.2$ on February 12, 2004. In ongoing research together with Dr. Neta Rabin we utilize a similar approach in order to discriminate between earthquakes and explosions.

מתאמים: פרופ' י. גולדמן, ד"ר ש. מיברג, פרופ' י. סטאנצ'סקו
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