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## **How to constrain the shape and location of magma chambers using seismic noise?**

**Legrand D., Spica Z., Iglesias A., Perton M.**

<sup>1</sup>Universidad Nacional Autónoma de México Instituto de Geofísica

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Volcanic activity is directly related to the size and location of magma chambers, which are often poorly constrained. We show few examples of how seismic noise tomography may give relatively precise images of the structure under a few volcanoes. We show how the depth and shape of magma reservoirs are different for polygenetic volcanoes and for monogenetic volcanic fields. To solve these questions, large seismic networks are required and different techniques have to be used to image deep magma and volcanic structures. Different applications are shown in Mexico and Chile.