

**Back to the roots:
2D EIT reconstructions using Calderón's method**

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Alberto Calderón introduced the inverse conductivity problem by raising the question of whether the (electrical) conductivity in the interior of an object can be uniquely determined by surface measurements. Moreover he outlined a method for approximating the conductivity under the assumption that it is sufficiently close to a constant in his article 'On an inverse boundary problem'. Since then this idea found its way into several applications including electrical impedance tomography (EIT) for medical imaging and electrical resistance tomography (ERT) in geophysical science to name a few.

This talk is about the pioneering work of Calderon and his method of reconstruction applied to simulated and human chest data. It is demonstrated that the original algorithm proposed by Calderón can be used to obtain reconstructions on experimental data and holds promise as a fast algorithm for practical use.