

Maths in Magnetic Resonance Imaging (**MRI**)

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The **MRI** (Magnetic Resonance Imaging) is a non-invasive diagnostic procedure employed in the **MR** (Magnetic Resonance) scanner to obtain detailed sectional images of the internal structure of the body. This technique has played a major role in the revolution over the last 40 years. In this sense, the influence and development of Mathematics are essential for making it possible with accurate, eliminating the **Artifacts** of the images, and quickly with efficiency, recovering as soon as possible the investment of the medical equipments. We will introduce the **Bloch equation** which govern the **MRI** process, and some numerical, discretization and convergence methods for modelling and resolving it [1], [2].

References

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- [3] L. Oleaga, J. Lafuente *Aprendiendo los fundamentos de la resonancia magnética*. Sociedad Española de Radiología Médica.