

RODAM - Robust Optimal Design under Additive Manufacturing constraints



An exploratory project invites teams of 3 to 4 scientists to propose innovative research, new or disruptive topics, to reduce identified barriers, but also to promote interdisciplinarity and dissemination of information.

The RODAM project aims, with the partnership of Safran Helicopter Engines, to develop new **algorithms** for optimal design, robust and adapted to the constraints of metal printing, with the objective of producing mechanical parts.

The various exchanges with the industrial partner have given rise to new scientific questions with deep industrial motivations. More precisely, this project wishes to tackle new challenges in terms of **shape optimization**.

These new design tools aim to reduce the weight of mechanical devices and thus **lower the fuel consumption of helicopters**.

The RODAM project brings together the academic and industrial communities, on an emerging theme, with common objectives around important innovative scientific challenges.

RODAM project leader



Marc Dambrine, Full Professor