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XXX XXX

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XXX XXX
XXX XXX

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Laburpena / Resumen / Abstract

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1 Introduction

The following are some basic rules for the preparation of this thesis (*Please check the most up-to-date regulations on the faculty website!*):

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- Maximum length: 40 pages, including the cover and references (appendices, if any, are excluded).
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- The thesis must contain at least the following parts: a cover (as in this template), a table of contents, an introduction and objectives, development, conclusions, and references; in addition, it must include a section of at least 200 words addressing the relationship between the thesis and the Sustainable Development Goals (SDGs), and/or presenting a critical perspective on them.
- The bibliography must include all cited sources (books, articles, proceedings, webs, etc) and be presented at the end of the thesis, following standard citation formats (e.g., APS, as in this template).
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2 Section A

Quantum field theory provides the theoretical framework for modern particle physics [1]. The discovery of asymptotic freedom was a key milestone in the development of QCD [2].

2.1 Subsection A.1

The Lagrangian of the Standard Model is

$$\mathcal{L} = -\frac{1}{4} F_{\mu\nu} F^{\mu\nu} + i \bar{\psi} \not{D} \psi + \psi_i y_{ij} \psi_j \phi + \text{h.c.} + |D_\mu \phi|^2 - V(\phi). \quad (1)$$

2.2 Subsection A.2

The beauty of (1) in Sec. 2.1 is clear. However, the relevance of the following equation is definitely comparable:

$$G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu} . \quad (2)$$

2.3 Subsection A.3

Even if the importance of equations (1) and (2) is superb, the elegance of Euler's equation is uncomparable:

$$e^{i\pi} = -1 . \quad (3)$$

3 Conclusions

Science is great!

4 Sustainable Development Goals

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References

- [1] M. E. Peskin and D. V. Schroeder, *An Introduction to Quantum Field Theory* (Westview Press, Boulder, CO, 1995).
- [2] D. J. Gross and F. Wilczek, [Phys. Rev. Lett. **30**, 1343 \(1973\)](#).