



**Spécimen: *Rapport de stage /  
Internship report***

**\* Le stagiaire / Trainee**

Nom: HAMDELLOU  
Prénom: HILAL  
Grade: Etudiant de Doctorat  
Faculté: Des Sciences Exactes

**\* Le stage / The internship**

**Lieu:** International Centre for Theoretical Physics (ICTP), Trieste, Italy.

**Période du stage:** un mois de 05/09/2017 – 04/10/2017.

**Objectifs:** Discussion the preliminary results and performing more advanced numerical simulations.

**\* Déroulement du Stage / Internship progress**

The very good scientific atmosphere provided by the ICTP made me benefit from this visit the following:

- Perform more advanced numerical tasks that require powerful computing facilities, which are available at the ICTP.
- End and discuss the preliminary results.
- Start another research project.
- Attendance of many scientific activities organized by the ICTP from seminars and lectures.
- Attend courses with "Diploma students" (High Energy, Cosmology and Astroparticle Physics section) for three-week in two courses:
  - \* Relativistic Quantum Mechanics.
  - \* Lie Groups and Lie Algebras.

Access to the various scientific references provided by the ICTP either through the Internet or its library.

**\* Résultats obtenus au cours de Stage / Results obtained during Internship**

- Start writing a paper draft that summarizes different results.

**Sceau de l'Organisme d'Accueil du Stage**  
**Seal of the Internship Host Organization**

The Abdus Salam  
International Centre for Theoretical Physics  
Strada Costiera, 11 - 34151 Trieste - Italy  
www.ictp.it

**Signature du bénéficiaire du stage**  
**Signature of the trainee**

