



STATE UNIVERSITY OF MEDAN

**THE ANALYSIS OF GROUP DIVISION IN THE THINKING
ALOUD PAIR PROBLEM SOLVING (TAPPS) LEARNING
MODEL TO IMPROVE STUDENT LEARNING
OUTCOMES ON MOMENTUM
AND IMPULSE TOPIC**

THESIS

**Submitted to Fullfil The Requirements for
The Degree of Bachelor of Education**

**Nursyahadah
IDN. 4182121007**

Bilingual Physics Education Study Programs

Character Building
UNIVERSITY

**PHYSICS DEPARTMENT
FACULTY OF MATHEMATICS AND SCIENCE
MEDAN
APRIL 2025**