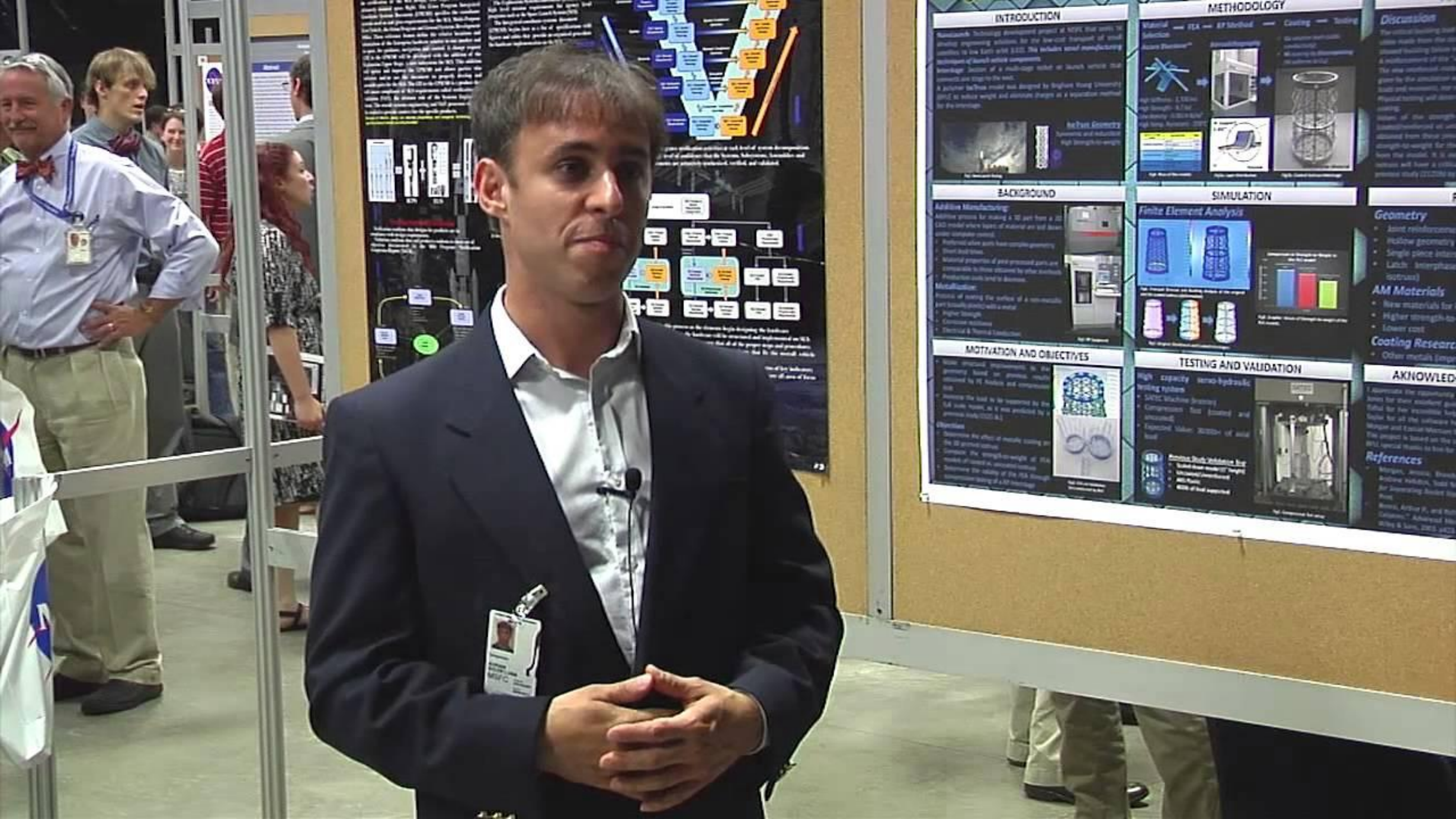
INTRODUCTION
METHODOLOGY
BACKGROUND
SIMULATION
MOTIVATION AND OBJECTIVES
TESTING AND VALIDATION
Finite Element Analysis
Geometry
AM Materials
References

1
00:00:20,220 --> 00:00:21,220
Music plays - People can be heard talking

2
00:00:21,220 --> 00:00:23,349
(Adrian Soler-Luna)
I'm Cuban, originally from Cuba.

3
00:00:23,349 --> 00:00:27,660
I'm studying at Wichita State University in
Wichita, Kansas.

4
00:00:27,660 --> 00:00:36,160
I'm an intern for the summer, working on
the nano-launch project, which is project

5
00:00:36,160 --> 00:00:39,910
which is trying to deliver small payloads
to

6
00:00:39,910 --> 00:00:42,120
space at a lower cost.

7
00:00:42,120 --> 00:00:43,120
It's been amazing.

8
00:00:43,120 --> 00:00:45,890
It's been very
interesting.

9
00:00:45,890 --> 00:00:49,460
Working here is awesome.

10
00:00:49,460 --> 00:00:50,850
Everybody looks so happy.

11
00:00:50,850 --> 00:00:55,909
Everybody is so helpful.

12

00:00:55,909 --> 00:01:03,820
Everybody is motivated and it's been an
awesome summer.

13
00:01:03,820 --> 00:01:21,979
(Paige Green)
I'm from Anchorage Alaska.

14
00:01:21,979 --> 00:01:35,100
I'm a mechanical engineering student at
Alabama A&M University and I'm a senior.

15
00:01:35,100 --> 00:01:36,950
I've worked with NASA in the past.

16
00:01:36,950 --> 00:01:40,070
I did two
internships at Goddard Space Flight

17
00:01:40,070 --> 00:01:41,070
Center.

18
00:01:41,070 --> 00:01:45,710
It was with the NSTI program and I
wanted to continue to search for

19
00:01:45,710 --> 00:01:49,659
opportunities for this summer so I went to
the OSSI website and applied to as many

20
00:01:49,659 --> 00:01:50,659
as I could.

21
00:01:50,659 --> 00:01:52,530
It's been a great experience.

22
00:01:52,530 --> 00:01:55,850
I love the intern program that is at Marshall.

23

00:01:55,850 --> 00:02:00,170
All the activities they have for the interns,
the opportunities to connect with other

24
00:02:00,170 --> 00:02:01,170
interns.

25
00:02:01,170 --> 00:02:04,930
And I also enjoyed the mentors that
I worked with and the interns that I worked

26
00:02:04,930 --> 00:02:05,930
with.

27
00:02:05,930 --> 00:02:10,910
So, photo elasticity, it's a phenomenon
when you put a stress on a transparent

28
00:02:10,910 --> 00:02:11,910
part.

29
00:02:11,910 --> 00:02:18,280
It produces fringes because when you
shine a light through the material, it

30
00:02:18,280 --> 00:02:22,390
produces two components with different
directions and velocities.

31
00:02:22,390 --> 00:02:27,200
And the change in
velocity produces a relative retardation and

32
00:02:27,200 --> 00:02:29,210
that produces the color fringes.

33
00:02:29,210 --> 00:02:34,470
I've learned, working here, that you can
work on something for a long period of time

34
00:02:34,470 --> 00:02:38,810
and that it might not turn out the way you
want it to, so you need to think of other

35
00:02:38,810 --> 00:02:41,170
ideas to get a solution for your problem.

36
00:02:41,170 --> 00:02:44,010
It's
not always going to be one method to solve

37
00:02:44,010 --> 00:02:45,010
your problem.

38
00:02:45,010 --> 00:02:46,030
So, I learned that.