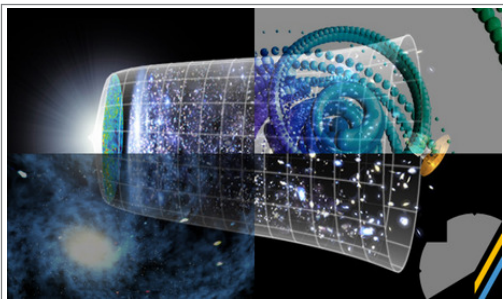


SEPTEMBER 23, 2014

# Statement of Accomplishment

## GIRIJA SHANKER TIWARI

HAS SUCCESSFULLY COMPLETED THE UNIVERSITY OF TOKYO'S ONLINE OFFERING OF



### From the Big Bang to Dark Energy

This course covers various topics on the discoveries about how the Universe evolved in the 13.7 billion years since the Big Bang. This certificate is awarded in recognition of successful completion of the Basic Track or the Advanced Track (if with Distinction) of the course.

A handwritten signature in black ink, reading "Hitoshi Murayama".

HITOSHI MURAYAMA

DIRECTOR, KAVLI INSTITUTE FOR THE PHYSICS AND MATHEMATICS OF THE UNIVERSE (KAVLI IPMU)

TODAI INSTITUTES FOR ADVANCED STUDY (TODIAS)

THE UNIVERSITY OF TOKYO

PLEASE NOTE: THE ONLINE OFFERING OF THIS CLASS DOES NOT REFLECT THE ENTIRE CURRICULUM OFFERED TO STUDENTS ENROLLED AT THE UNIVERSITY OF TOKYO. THIS STATEMENT DOES NOT AFFIRM THAT THIS STUDENT WAS ENROLLED AS A STUDENT AT THE UNIVERSITY OF TOKYO IN ANY WAY. IT DOES NOT CONFER THE UNIVERSITY OF TOKYO GRADE; IT DOES NOT CONFER THE UNIVERSITY OF TOKYO CREDIT; IT DOES NOT CONFER THE UNIVERSITY OF TOKYO DEGREE; AND IT DOES NOT VERIFY THE IDENTITY OF THE STUDENT.