



# Mechanical behavior and Optimization of Additively Manufactured Metal structural components

By **Bingbing San**

Time: **Jun. 30<sup>th</sup>** (Mon.)  
**2:00–3:30** p.m.

**Venue: University of Tokyo, IIS  
Bldg.E 2F Lounge**  
(Walk-ins are welcome !)



## Lecture Contents:

Additive manufacturing, as a revolutionary technology, has the potential to tackle the multiple challenges in civil engineering, e.g., low-carbon requirements and intelligence construction. Focusing on the application of metal additively manufacturing (MAM) in structural engineering, this lecture first introduces mechanical behaviors of MAM formed material and structural components, in which their unique mechanical properties are revealed. Subsequently, an innovative structural optimization method applied to MAM is presented, by which the substantial advantage of MAM in building structural components (e.g., free- corrugated columns) with complex geometric shape is demonstrated.



**Host:** The university of Tokyo, IIS, Dept.5 Kawaguchi Lab.

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