

# LOOPFEST

## XXII

<https://indico.cern.ch/e/Loopfest2024>



## Welcome to LoopFest in Dallas!

The 22<sup>nd</sup> LoopFest meeting on perturbative calculations in quantum field theory  
and their applications

The theme of this year's workshop:  
Maximizing the impact of precision calculations

Synergies between advancements in multiloop techniques, parton showers, nonperturbative functions, numerical methods

3 days, 30 talks with plenty of time for discussions

Opportunities to meet international and SMU experts in relevant areas

We thank the SMU Department of Physics, Dedman College of Humanities and Sciences, Moody School of Graduate and Advanced Studies for generous support

We also thank the LoopFest Advisory Committee for help with planning of the workshop

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## **Robert Stewart Hyer (1860-1929)**

- The founder and first president of SMU
- A physicist
- A pioneer in applications of radio waves and X-rays



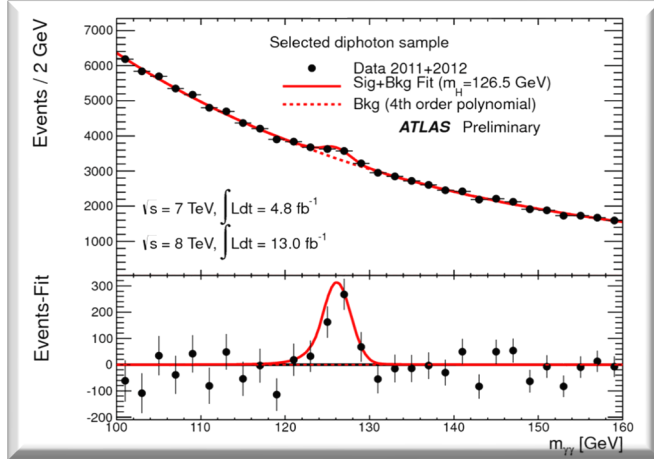


Professor Hyer demonstrating scientific equipment to faculty at Southwestern University. Hyer built a telegraph after reading about Dr. James Maxwell's theory of electromagnetic waves. He was sending radio messages to the Williamson County jail, about 2 miles from campus, two years before Marconi received his patent. He built an X-ray apparatus after reading articles about X-ray experiments. The State Medical Association asked him to demonstrate the advantages of X-ray, as applied to surgery, at a meeting in Waco, Texas in 1897. Circa 1895

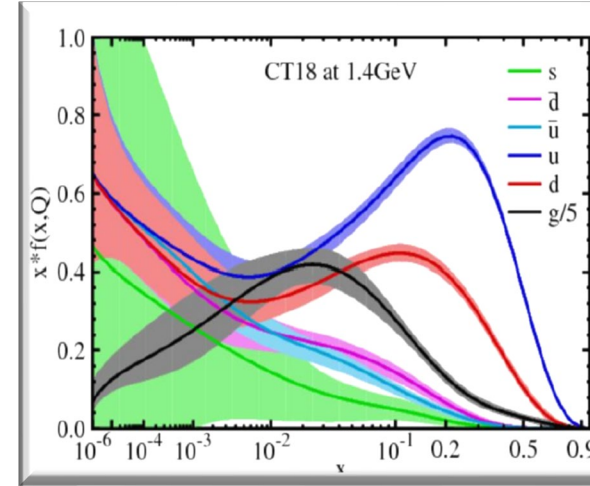
# SMU Department of Physics today

<http://www.physics.smu.edu/web/>

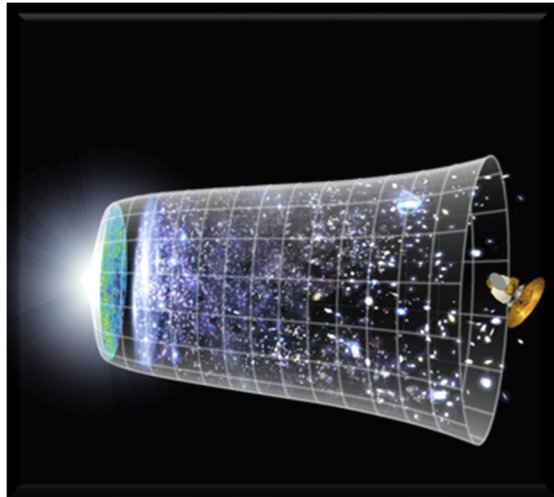
**Particle experiments**  
 ATLAS (Higgs, top, ...),  
 NOvA, ...



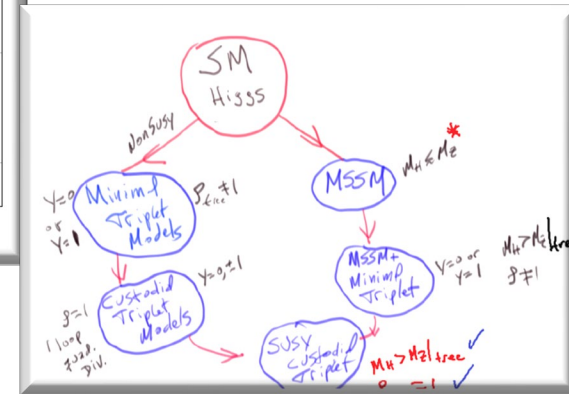
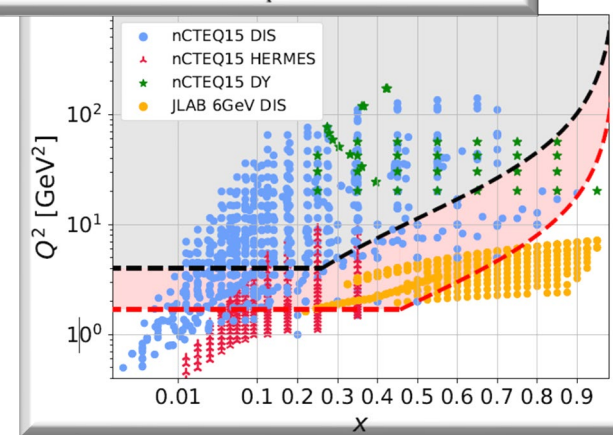
## Particle phenomenology



Hadron structure, QCD  
 computations, model  
 building, CTEQ node, ...



**Astrophysics &  
 Cosmology**  
 Simons Observatory,  
 CMB-S4, DESI,  
 ROTSE, DES, ...

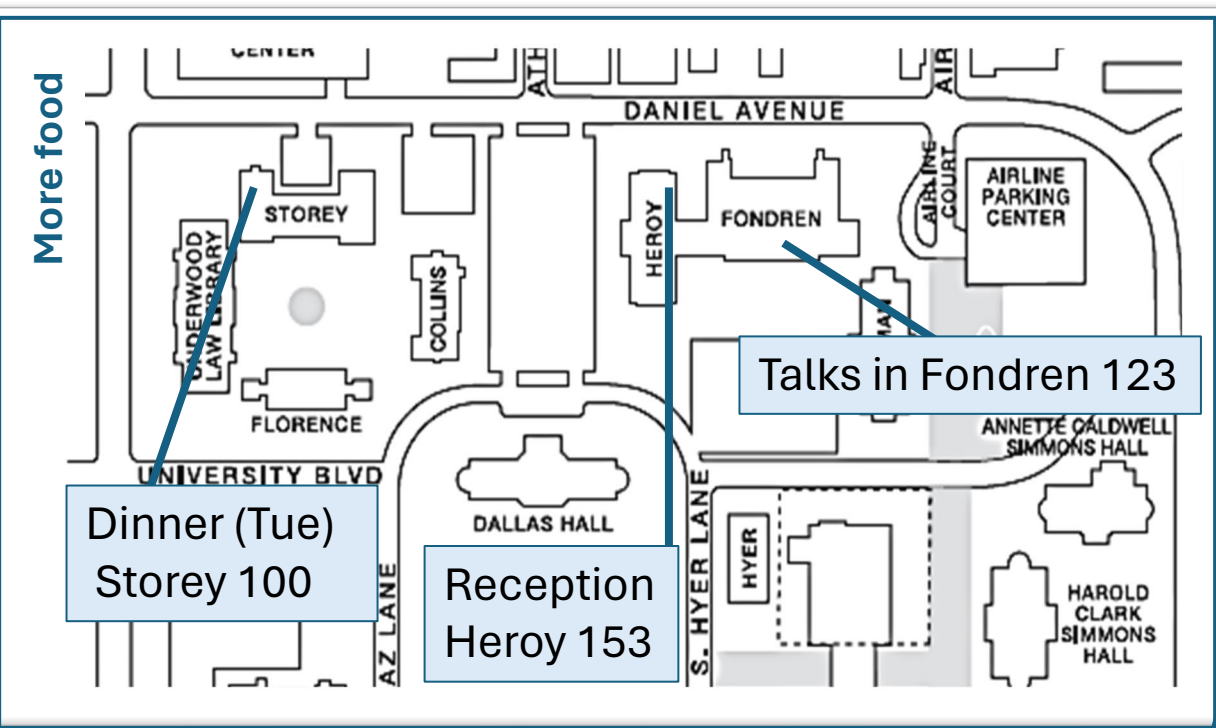


# Venue and surroundings

Dallas Hall

Dedicated in 1915 by R. S. Hyer  
“Hilltop”  
In the National Register of Historic Places

SMU®



More food

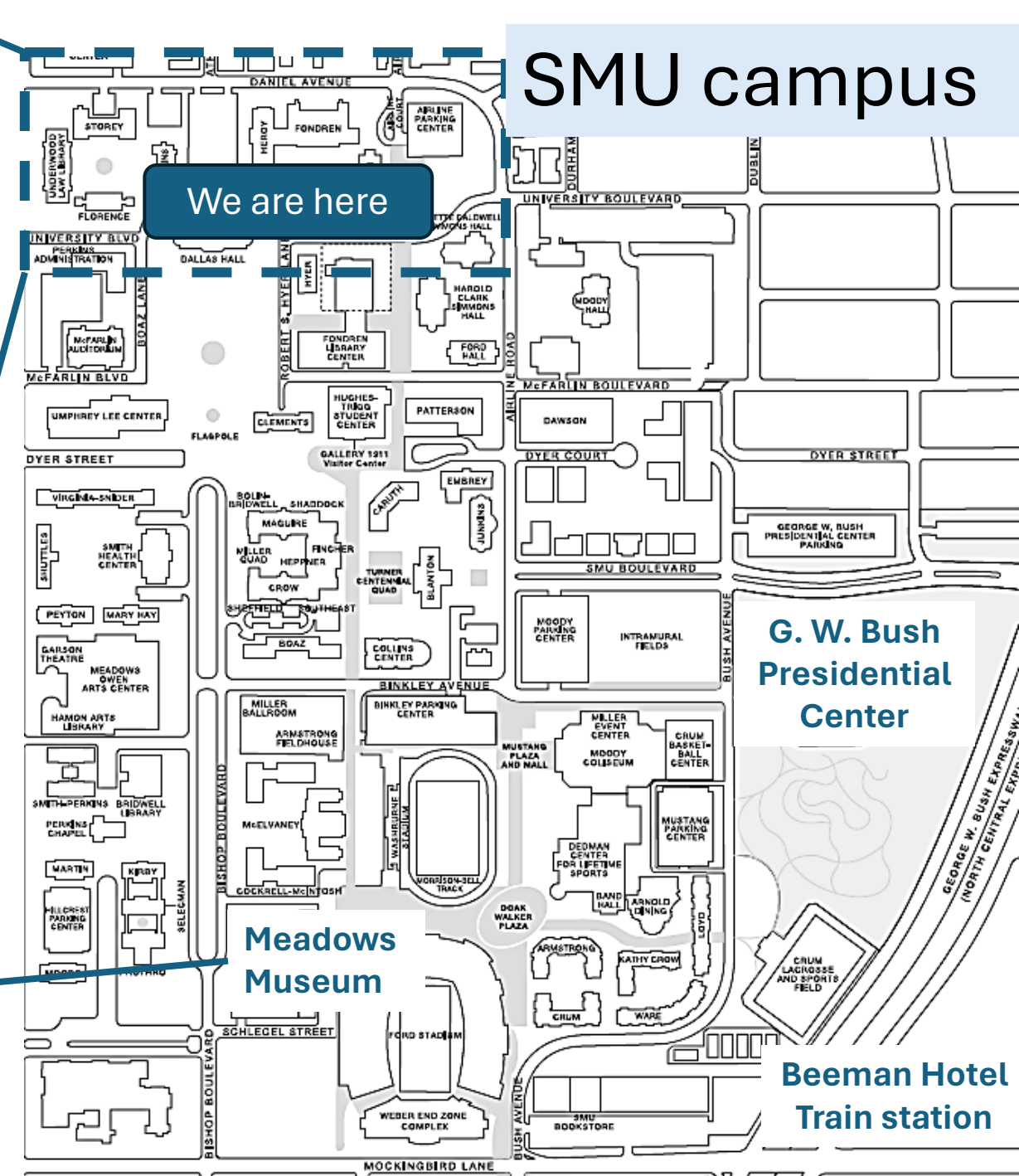
Dinner (Tue)  
Storey 100

Reception  
Heroy 153

Talks in Fondren 123

LoopFest venue

One of the largest  
collections of Spanish art  
outside of Spain



SMU campus

We are here

Meadows  
Museum

G. W. Bush  
Presidential  
Center

Beeman Hotel  
Train station

# Practical matters

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1. Please upload your slides to Indico well in advance before the talk or email them to [Nadolsky@smu.edu](mailto:Nadolsky@smu.edu) or [olness@smu.edu](mailto:olness@smu.edu) to upload for you
2. **Wi-Fi** access is available both through eduroam and SMU Guest networks.
3. Coffee and snacks in the back of the room
4. Box lunches will be provided on all three days (both regular and vegetarian options)
5. If you need a participation certificate, send an email to [Nadolsky@smu.edu](mailto:Nadolsky@smu.edu).
6. We ask all participants to help us maintain the atmosphere of collegiality and mutual respect in accordance with [the Code of Conduct at APS meetings](#).

We wish you a productive workshop!