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Coláiste na Tríonóide, Baile Átha Cliath Trinity College Dublin Ollscoil Átha Cliath | The University of Dublin

# 2D foam above the jamming transition: **Deformation matters**

September 4, 2017 | Jens Winkelmann



Trinity College Dublin Coláiste na Tríonóide, Baile Átha Cliath The University of Dublin

# Is the soft disk model accurate enough to model 2D foam?

## Soft disks



- D.J. Durian (1995)
- Disk overlap, but not deform



- Bolton/Weaire (1991)
- simulates foam exactly
- bubbles deform

### **Morse-Witten**



- Simulation based on Morse–Witten theory
- bubbles deform

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#### Jens Winkelmann, TCD



### The average contact number Z with varying packing fraction $\phi$



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# Conclusion

# # 2D foams are not well described by soft disks above jamming# DeformationMatters



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