

CGM @ Berlin 2019

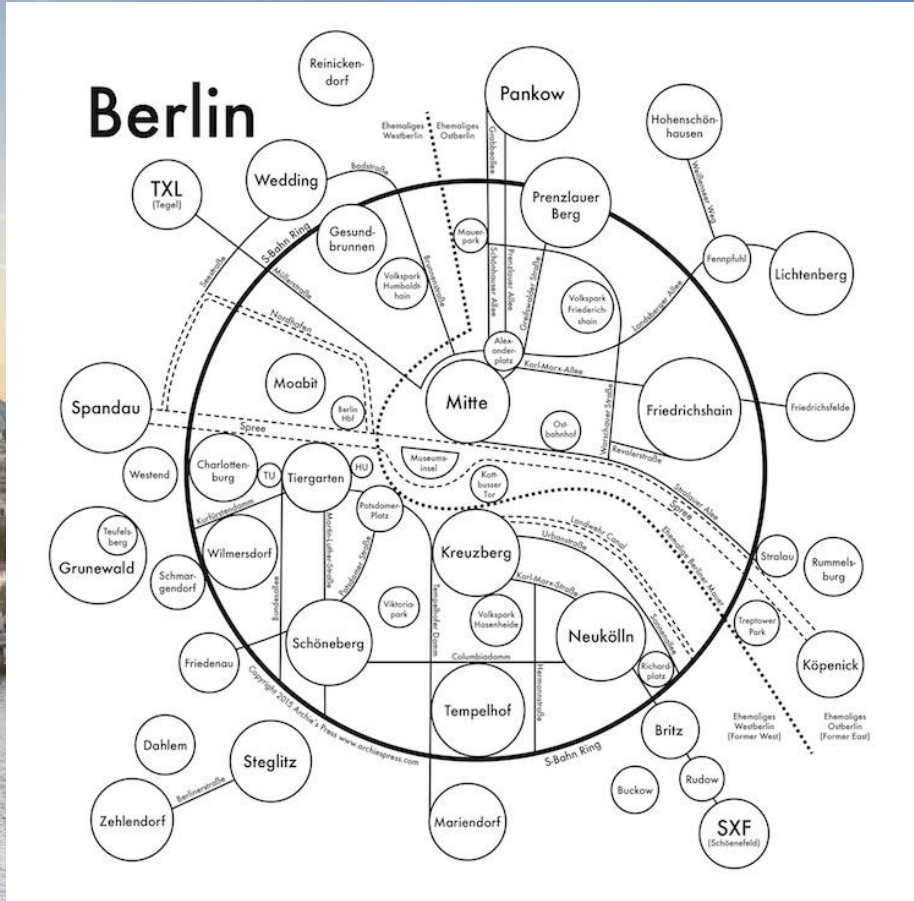
Harnack House, 3-5 Oct, 2019

program and info:

www.mpa-garching.mpg.de/conf/berlincgm2019/

or google "cgm conference berlin"





Harnack House of the MPG



CGM BERLIN 2019 -- SCHEDULE

3-5 October 2019, Harnack House

WEDNESDAY (OCTOBER 2)

- Expected arrival of most participants.
- Welcome Dinner: @ Harnack House, 7pm.

THURSDAY - DAY 1 (OCTOBER 3)

SESSION 1 - NEW PERSPECTIVES ON THE CGM (CHAIR: DYLAN NELSON)

9:00AM - 10:40

- Quick words of welcome (10)
- Nikki Nielsen - Galaxy Gas Flows at Cosmic Noon with KCWI (15+5)
- Kate Rubin - Spatially Resolving the Small-Scale Structure of Circumgalactic Gas Flows (15+5)
- Joop Schayle - New results from EAGLE and MUZE (20+5)
- Celine Peroux - Observed and simulated multi-phase properties of the CGM (20+5)

MORNING COFFEE

10:40 - 11:40

SESSION 2 - THE SMALL-SCALE CGM (CHAIR: JONATHAN STERN)

11:10 - 12:40

- Evan Schneider - The Role of Mixing in Galactic Outflows (15+5)
- Dylan Nelson - Small-scale CGM structure around massive ellipticals in TNG50 (10+5)
- Lauren Corlies - Quantifying the Small Scale Structure in FOGGIE (10+5)
- Eugene Churazov - How viscous is the CGM? (10+5)
- Cameron Liang - Predictions from the Circumgalactic Mist (20+5)

LUNCH @ HARNACK HOUSE

12:40 - 14:20

SESSION 3 - THE MULTI-PHASE CGM (CHAIR: DANIEL ANGLES-ALCAZAR)

14:20 - 15:40

- Prateek Sharma - Multiphase gas in galactic outflows (15+5)
- Drummond Fielding - The Anatomy of Radiative Mixing Layers (15+5)
- Freeke van de Voort - Enhanced cool, dense gas in refined galaxy haloes (15+5)
- Evan Scannapieco - The impact of turbulence and non-equilibrium chemistry on the CGM (15+5)

AFTERNOON COFFEE

15:40 - 16:20

DISCUSSION SESSION - THURSDAY (LEADERS: D. KERES, S. JOHNSON)

16:20 - 17:30

CONFERENCE DINNER: @ THE NEARBY [ALTER KRUG RESTAURANT](#)

17:30 -

FRIDAY - DAY 2 (OCTOBER 4)

SESSION 4 - THE LOW-REDSHIFT CGM (CHAIR: JOHN CHISHOLM)

9:00AM - 10:45

- Jessica Werk - The Nature of Ionized Gas in the Milky Way Galactic Fountain (20+5)
- Philip Richter - Tracing the hot CGM with coronal broad Ly alpha absorbers (15+5)
- Thales Gutcke - Hot and cold gas in the CGM across halo mass (10+5)
- Maan Hani - Major evolutionary drivers of the low-z CGM (15+5)
- Ting-Wen Lan - Probing the CGM with Large Surveys (20+5)

MORNING COFFEE

10:45 - 11:15

SESSION 5 - ACCRETION (CHAIR: KATE RUBIN)

11:15 - 12:40

- Sanch Borthakur - Signposts of gas accretion and feedback at the disk-CGM interface (15+5)
- Jing Wang - The Bluedisk project: searching for footprints of gas accretion (15+5)
- Michele Fumagalli - Gas around galaxies at $z=2-3$: linking emission & absorption w/ large surveys (15+5)
- Jonathan Stern - The maximum accretion rate of hot halo gas at $0 < z < 10$ (15+5)

LUNCH @ HARNACK HOUSE

12:40 - 14:20

SESSION 6 - KINEMATICS AND FLOWS (CHAIR: EVAN SCHNEIDER)

14:20 - 16:10

- Zach Hafen - The Baryon Cycle of the CGM in FIRE (15+5)
- Max Gronke - How galactic winds can transport cold gas into the CGM (15+5)
- Crystal Martin - Kinematics of Circumgalactic Gas (15+5)
- Chuck Steidel - Emission from the CGM of high-redshift Galaxies: Observations and Implications (20+5)
- Tim Heckman - The Impact of Starbursts on the CGM (15+5)

AFTERNOON COFFEE

16:10 - 16:40

DISCUSSION SESSION - FRIDAY (LEADERS: B. OPPENHEIMER, J. BURCHETT)

16:40 - 17:40

CONFERENCE DINNER: @ HARNACK HOUSE

19:00 -

SATURDAY - DAY 3 (OCTOBER 5)

SESSION 7 - TOWARDS HIGH REDSHIFT: (OUT)FLOWS (CHAIR: DRUMMOND FIELDING)

9:00AM - 10:40

- Christy Tremonti - Finding the Galaxies with the Fastest Outflows: Is Compactness the Key? (10+5)
- David Rupke - Makani: a 100 kiloparsec galactic wind feeding the circumgalactic medium (15+5)
- John Chisholm - Down the barrel outflow observations explore the build-up of metals in the CGM (15+5)
- Reinhard Genzel - Feedback at $z=1-2.5$ (20+5)
- Daniel Angles-Alcazar - Large-scale baryon transfer in cosmological simulations (15+5)

MORNING COFFEE

10:40 - 11:10

SESSION 8 - THE HIGH-REDSHIFT CGM AND HOT HALOS (CHAIR: JOOP SCHAYE)

11:10 - 12:50

- Joe Burchett - Towards a unified understanding of the IGM and CGM thanks to slime mold (20+5)
- Sebastiano Cantalupo - A 3D view of the CGM illuminated by quasar fluorescent emission (15+5)
- Ema Farina - From Cosmic Dawn to Noon: (non-)Evolution of the CGM in the first 3Gyr of the Universe (10+5)
- Sean Johnson - The $z=0-1$ CGM, dwarfs to ellipticals and quasars in emission and absorption (15+5)
- Ben Oppenheimer - The Content of the CGM will be determined very soon by eROSITA (15+5)

LUNCH @ HARNACK HOUSE

12:50 - 14:30

SESSION 9 - METALS AND THE BARYON CYCLE (CHAIR: CELINE PEROUX)

14:30 - 16:00

- Dusan Keres - Gaseous halos in FIRE simulations (20+5)
- Nicole Sanchez - Tracing the Metal Enrichment of the CGM in Simulated Galaxies (15+5)
- Camila Correa - Low-metallicity regions as indicators of recent gas inflow (10+5)
- Glenn Kacprzak - The Spatial Distribution of Metallicity in the CGM (15+5)

AFTERNOON COFFEE

16:00 - 16:30

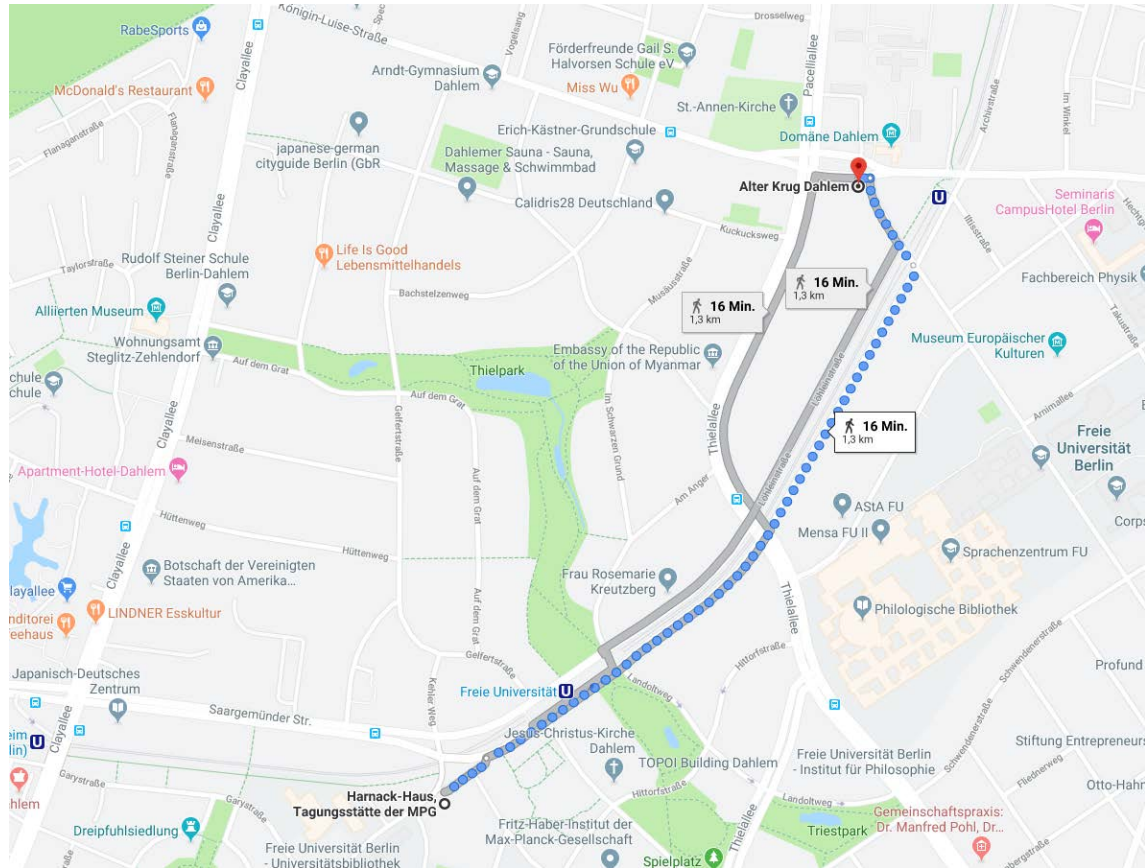
DISCUSSION SESSION - SATURDAY (LEADERS: C. MARTIN, J. WERK)

16:30 - 17:30

DEPARTURE / DINNER FREE

17:45

Tonight: dinner at the Alter Krug restaurant, 7:30pm

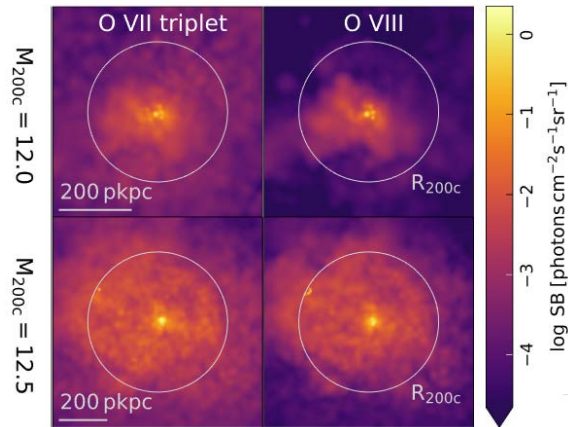


walking group
leaving @ 7:10pm
(main entrance)

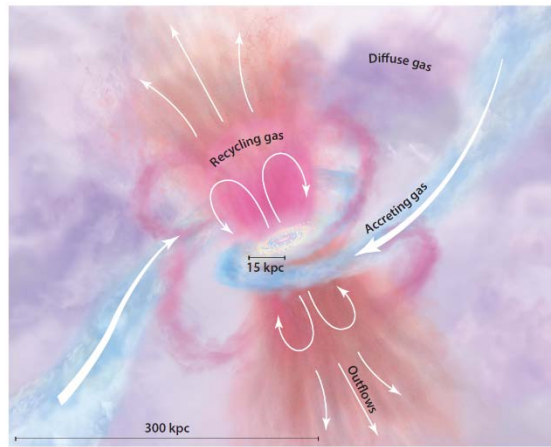
Key science questions

1. What is the **structure and properties of the CGM** from **sub-parsec to halo scales**, and what are the most important **physical mechanisms** at play?
2. How are **galaxies, gas flows, and the CGM** related?
3. Where has the **comparison of observations and theory** produced insight, where are we still falling short, and what are the **next steps**?

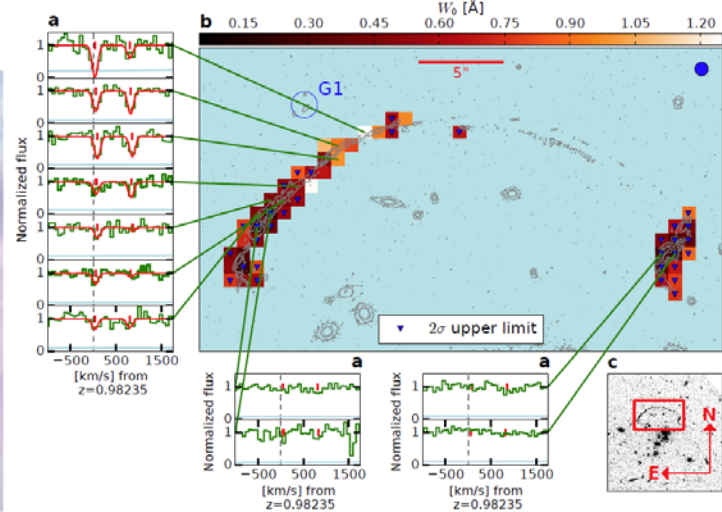
(lively + respectful discussion)



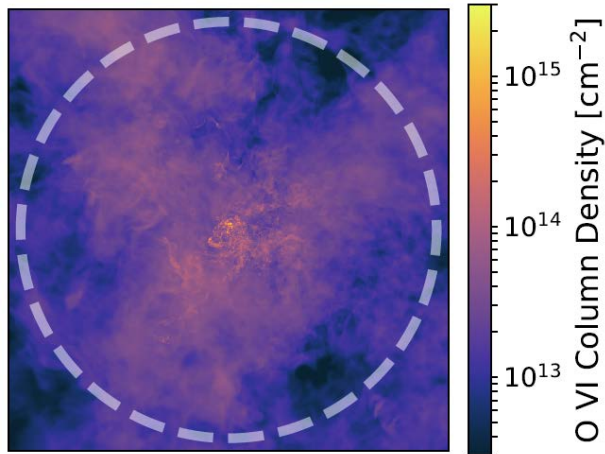
Wijers/Simionescu+ 2019



Lopez+ 2018

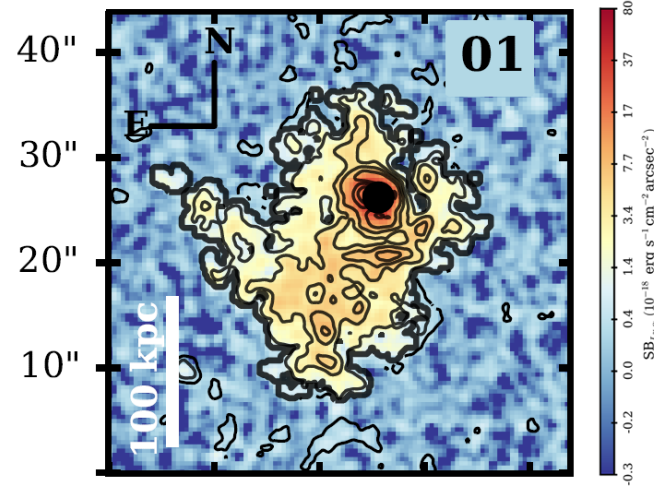


Tumlinson, Peeples, Werk 2017



Hummels+ 2019

Borisova+ 2016



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