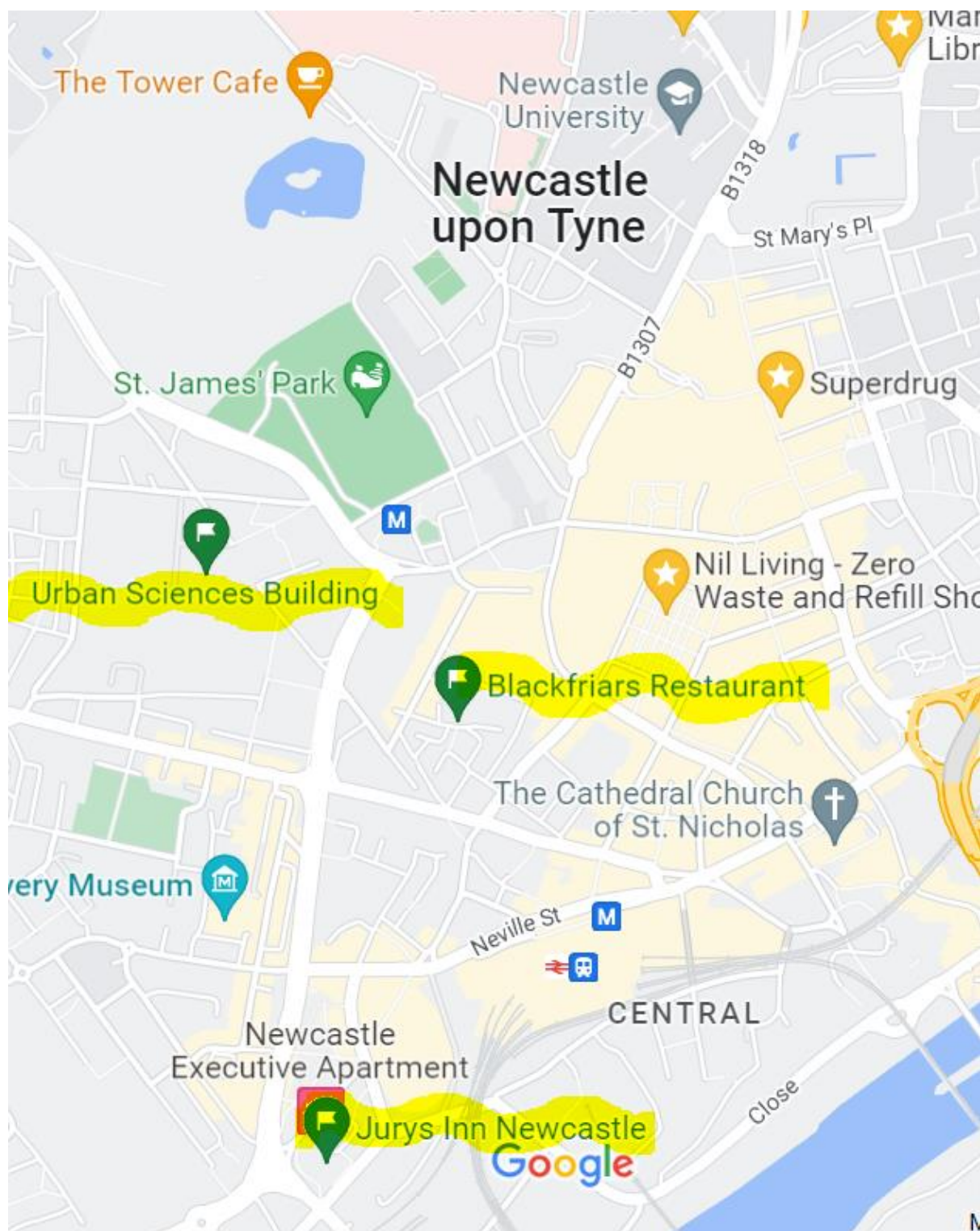


UKCTRF Annual Meeting

13th & 14th September 2022

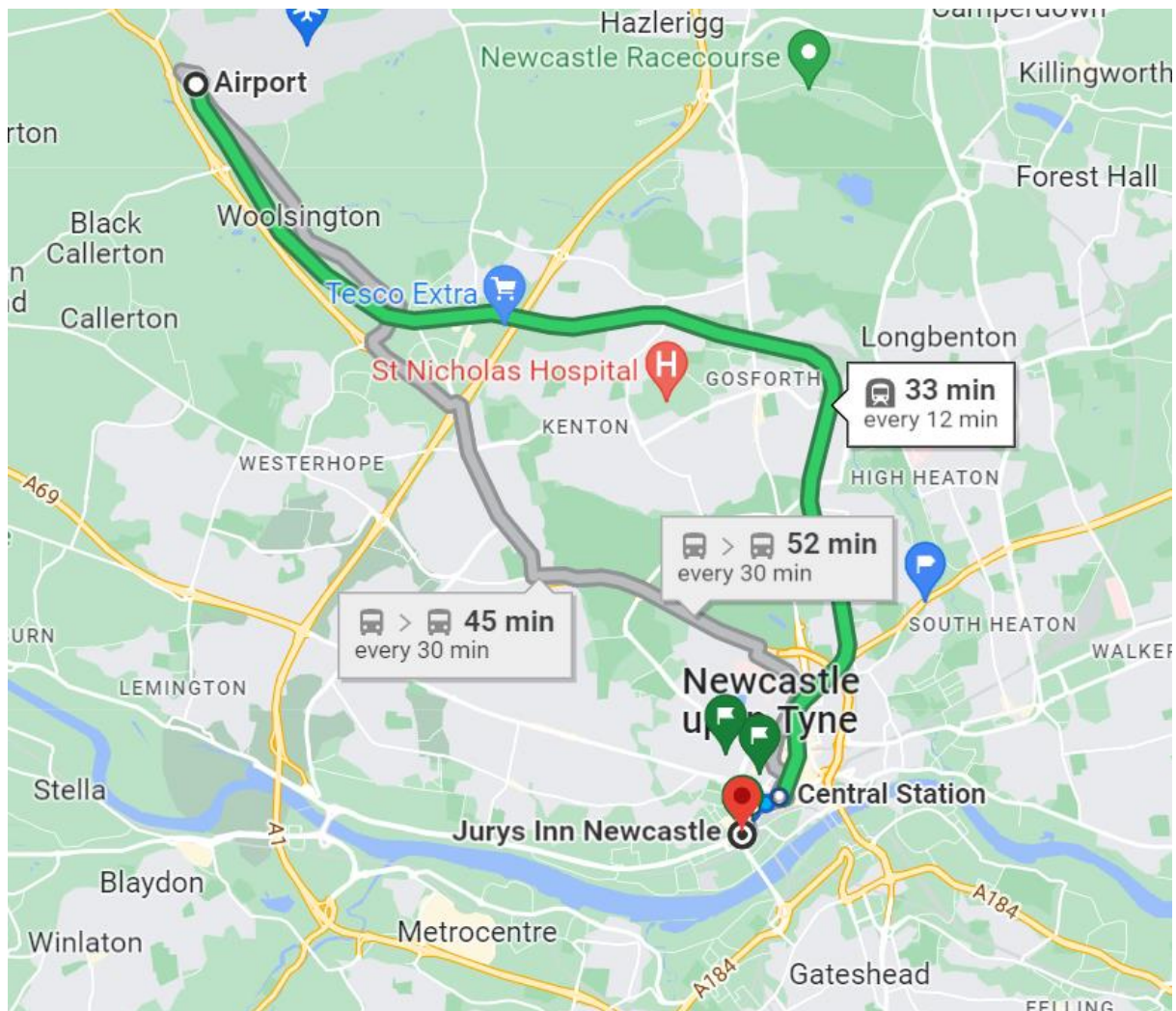


Travelling to Newcastle

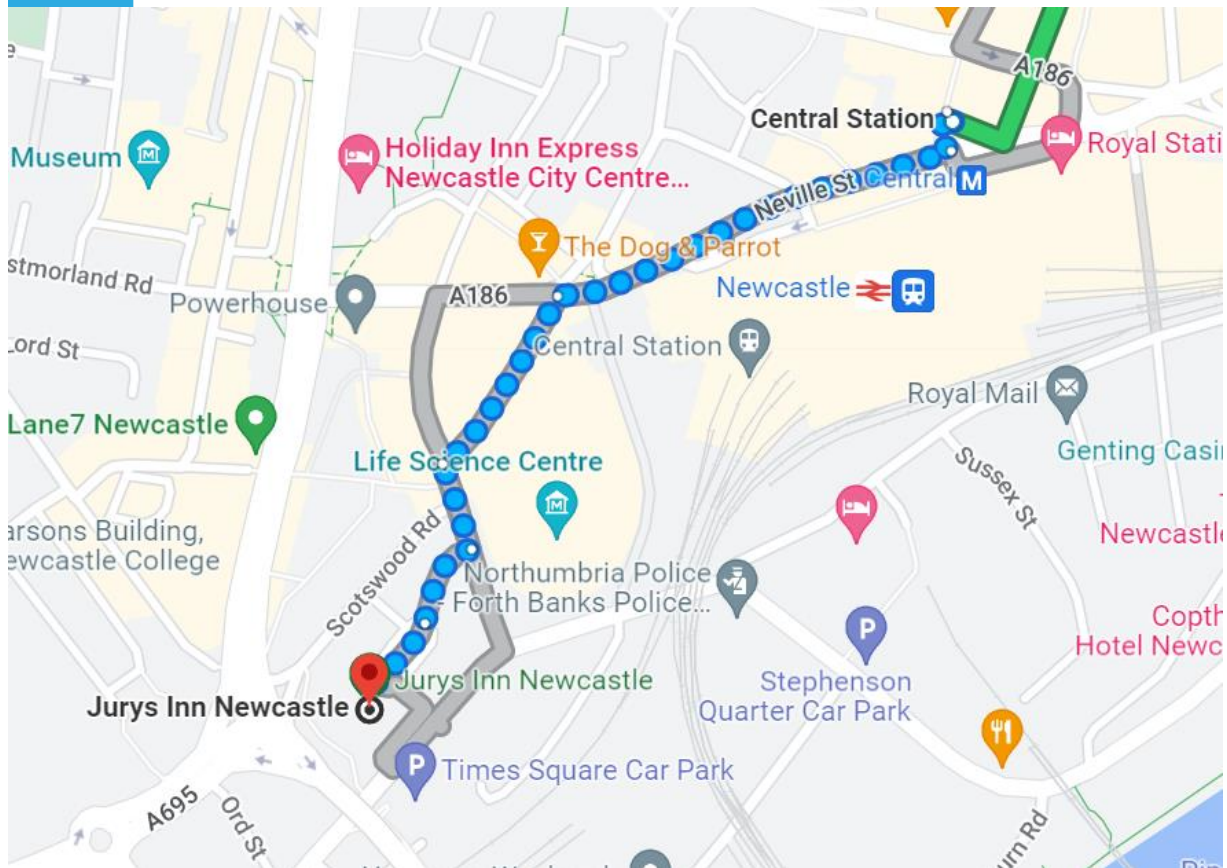
By Air

There are frequent Metro services from Newcastle International Airport into the City Centre. Once you are through Arrivals and have entered the public area of the airport, turn left walk to the end of the building; there is a covered passageway that takes you right to the Metro. You must buy tickets at the yellow ticket machines before you pass through the barriers. Then...

Airport to Jurys Inn (on Scotswood Road): Take the Green Line Metro to Central Station (1). When you exit the station, turn left onto Neville Street, walk 5 minutes then turn left onto Times Square (2), walk 2 minutes then turn left onto Marlborough Road. Walk 1 minute down Marlborough Road, cross at the traffic lights and enter the hotel complex (3). You will see the Jurys Inn ahead once you enter.



1. Airport to Central Station

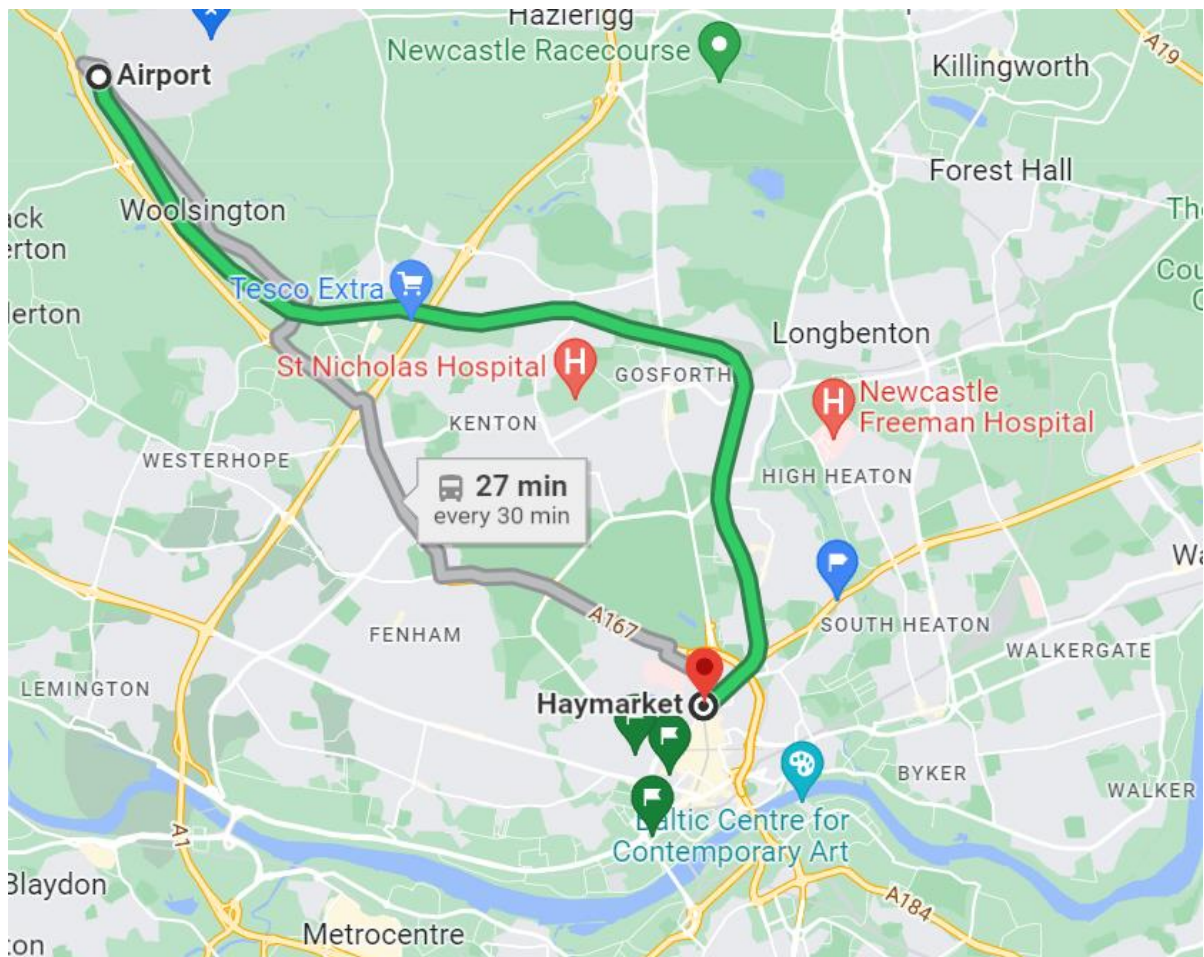


2: Central Station to Jurys Inn.

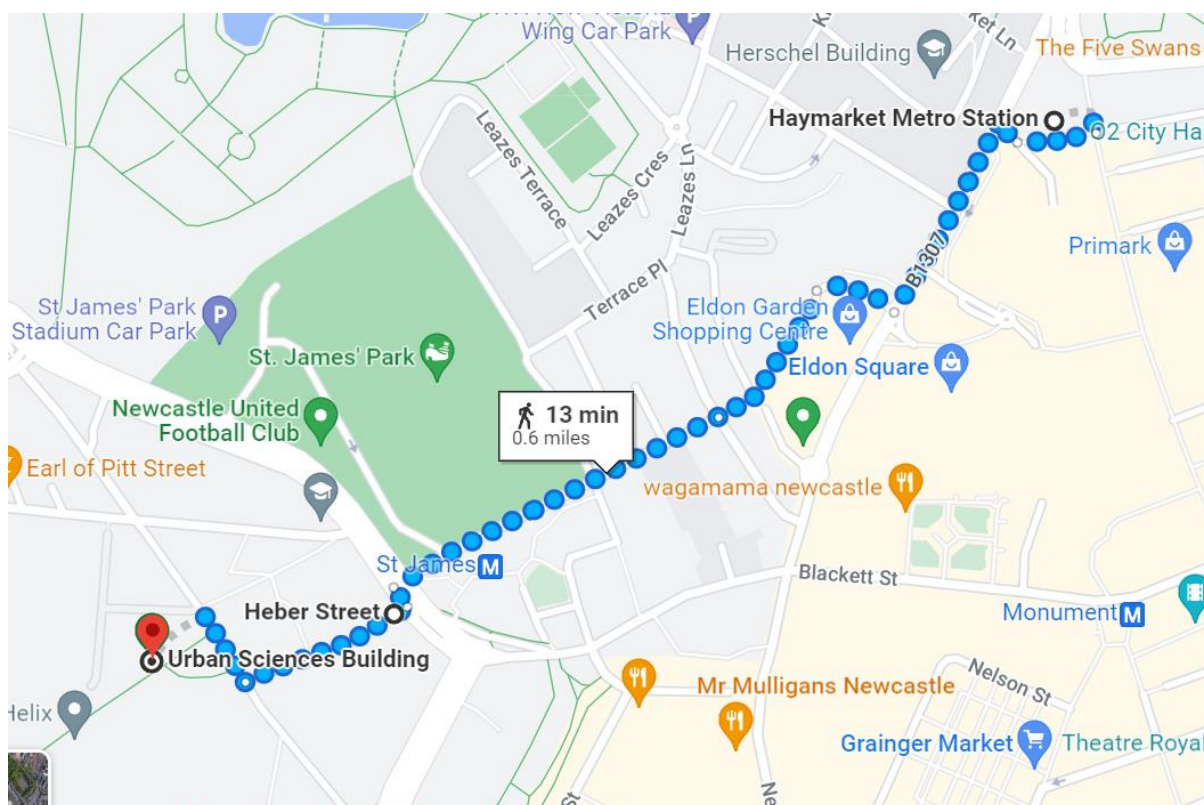


3. The entrance to the hotel complex where Jurys Inn is located.

Airport to Urban Sciences Building: Take the Green Line Metro to Haymarket (1). Exit onto Haymarket Street (2) then walk 2 minutes along B1307. Cross the road and enter Morden Street and follow it round to the left until it becomes Strawberry Place. Walk along Strawberry Place to Barrack Road, cross at the traffic lights, turn left then immediately right onto Heber Street. Follow Heber Street up and you will see the Urban Sciences Building (3).



1. Airport to Haymarket



2. Haymarket to Urban Sciences Building.

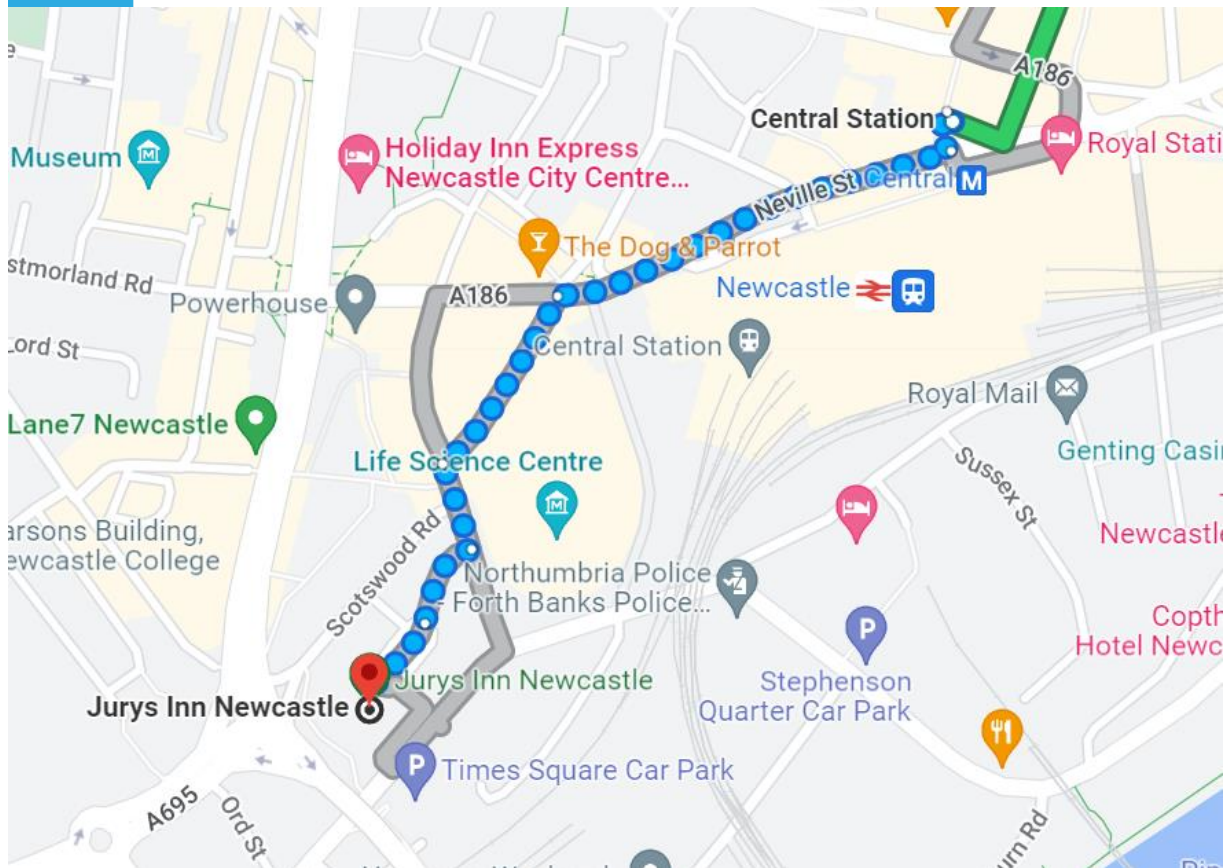


3. The Urban Sciences Building

By Rail

Take the train to Newcastle Central Station.

Central Station to Jurys Inn: Turn left onto Neville Street, walk 5 minutes then turn left onto Times Square (1), walk 2 minutes then turn left onto Marlborough Road. Walk 1 minute down Marlborough Road, cross at the traffic lights and enter the hotel complex (2). You will see the Jurys Inn ahead once you enter.



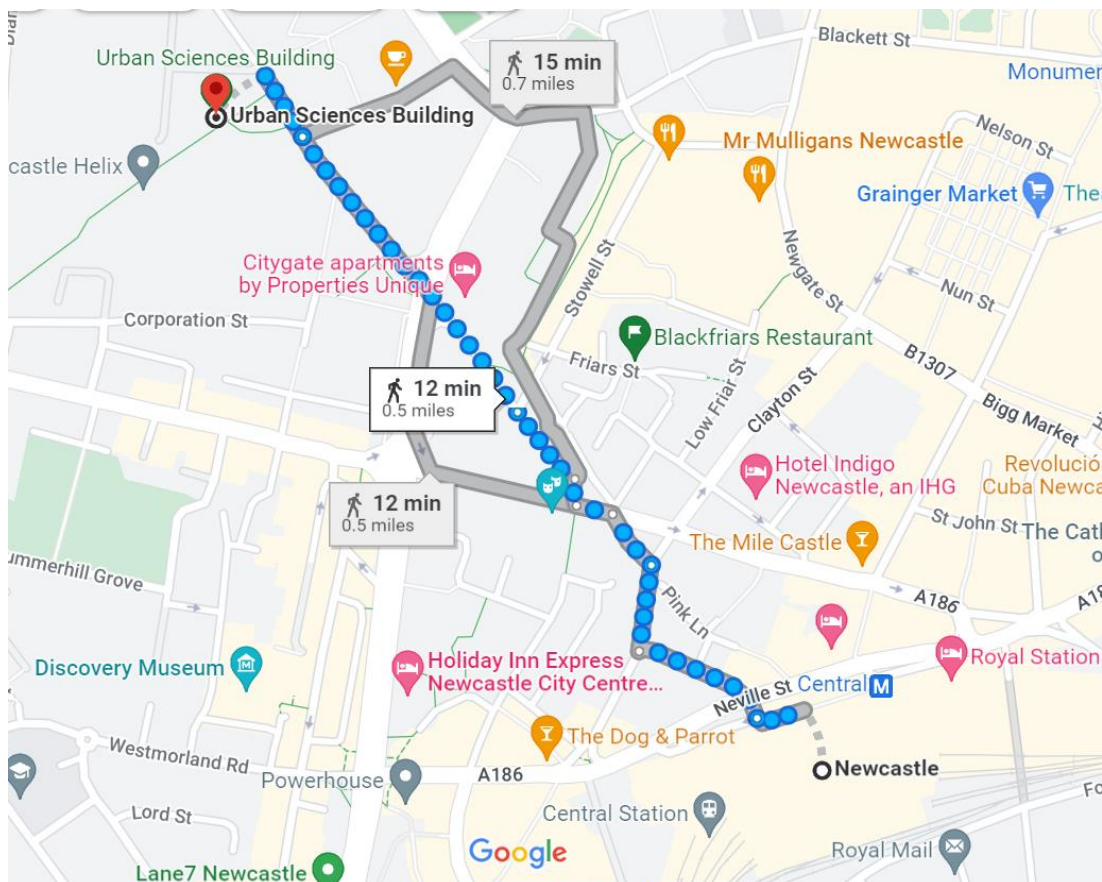
1. Central Station to Jurys Inn.



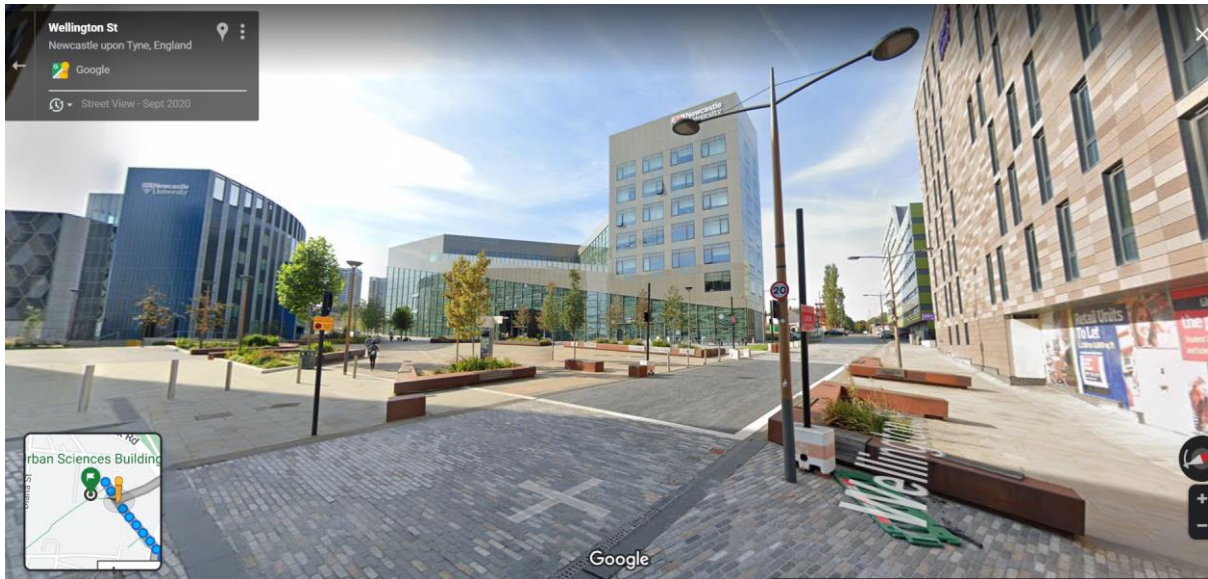
2. The entrance to the hotel complex where Jurys Inn is located.

Central Station to Urban Sciences Building:

Exit Newcastle Central Station onto Neville Street (1). Cross the road, walk up Bewick Street and turn right onto Clayton Street West. Walk 1 minute, then turn left onto Pink Lane, then left onto Westgate Road, cross the road and enter Thorntun Street. Follow it round to Bath Lane. Follow Bath Lane till you meet the main road, cross at the traffic lights and continue. Eventually Bath Lane turns into Wellington Street- at the top of Wellington Street you will see the Urban Sciences Building ahead to the left (2).



1. Newcastle Central to Urban Sciences Building



2. The Urban Sciences Building view from Wellington Street.

By Car

Parking Statement for the USB Building

There is a no parking system in operation at the Urban Science Building under any circumstances.

On the UKCTRF website on the Conference page is a copy of a map and parking spaces that are available in and around Newcastle.

Please take the time to read this statement and the attached parking information prior to your journey into Newcastle.

If any further help is needed, please report to the main USB reception on arrival.

Tuesday 13th September 2022

9.00-9.45	Registration and Coffee
9.45-10.00	Welcome and Introduction - Professor Nilanjan Chakraborty
10.00-10.15	ARCHER2 Service Update Dr William Lucas
10.15-11.00	Keynote Speaker: Professor Pascale Domingo <i>Combustion in supersonic flows</i> <i>Introduced by: Prof. W.P. Jones</i>
11.00-11.10	Implementation of the NSCBC boundary conditions in SENG+ X. Gu, N. Chakraborty, U. Ahmed, S. Cant and D. R. Emerson <i>Chaired by Dr. S. Navarro-Martinez</i>
11.10-11.20	Advancing Towards Exascale Computing Professor David Emerson <i>Chaired by Dr. S. Navarro-Martinez</i>
11.20-11.35	Coffee Break
11.35-11.55	Direct Numerical Simulations of Turbulent Stratified Jet Flames P. Brearley, U. Ahmed and N. Chakraborty <i>Chaired by Prof. R. S. Cant</i>
11.55-12.15	Large Eddy Simulation of period-2 thermoacoustic instabilities in the PRECCINSTA burner using flamelets A. D. Kumar, J. C. Massey, W. Meier, M. Stöhr and N. Swaminathan <i>Chaired by Prof. R. S. Cant</i>
12.15-12.35	Modelling of aerosol synthesis of silica nanoparticles in laminar and turbulent flames M. Tsagkaridis, G. Papadakis, S. E. Patsinis, S. Rigopoulos <i>Chaired by Prof. R. S. Cant</i>
12.35-12.55	Thermal Leading Points in Thermodynamically-Unstable Lean Premixed Hydrogen Flames T. L. Howarth, E. F. Hunt and A. J. Aspden <i>Chaired by Prof. R. S. Cant</i>
12.55-13.55	Lunch
13.55-14.40	Keynote Speaker - Professor Luc Vervisch <i>Novel findings in turbulent flame brush thickness dynamics and in the application of machine learning</i> <i>Introduced by: Prof. R.S. Cant</i>

14.40-15.00	Length Scale Effects in Thermodiffusively-Unstable Turbulent Lean Premixed Hydrogen Flames E. F. Hunt and A. J. Aspden <i>Chaired by Prof. A. Giusti</i>
15.00-15.20	"Scaling-up" fire spread on wood cribs using CFD X. Dai, C. Liu, W. Lu and S. Welch <i>Chaired by Prof. A. Giusti</i>
15.20-15.35	Coffee Break
15.35-15.55	Validation of HAMISH: DNS of Combustion with Adaptive Mesh Refinement R.S. Cant, U. Ahmed, J. Fang, N. Chakraborty, G. Nivarti, C. Moulinec and D. R. Emerson <i>Chaired by Prof. J. Wen</i>
15.55-16.15	Recent research progress on detonation and its application in propulsion system Z. Ren <i>Chaired by Prof. J. Wen</i>
16.15-16.35	Investigation of the dominant chemical pathways in n-heptane/air combustion under MILD conditions K. Abo-Amscha and N. Chakraborty <i>Chaired by Prof. J. Wen</i>
16.35-17.35	Management Committee and Impact Advisory Panel Meeting
16.35-18.45	Back to accommodation, networking, own time
18.45	Arrive at dinner venue
19.00	Conference Dinner

Wednesday 14th September 2022

9.00-9.30	Registration and Coffee
9.30-10.15	Keynote Speaker - Professor Andreas Dreizler <i>Wall-bounded premixed combustion</i> <i>Introduced by: Dr Salvador Navarro-Martinez</i>
10.15-10.35	Dispersion, evaporation and chemical kinetics of nanofuel sprays under external electrostatic fields D. Fredrich, E. Kritikos, Z. Budhwani, E. Weiland and A. Giusti <i>Chaired by Dr. U. Ahmed</i>
10.35-10.55	The effect of swirl on the flame dynamics and flame transfer function of premixed flames D. P. Kallifronas, P. Ahmed, J. C. Massey, M. Talibi, A. Ducci, R. Balanchandran, N. Swaminathan <i>Chaired by Dr. U. Ahmed</i>
10.55-11.10	Coffee Break
11.10-11.55	Keynote Speaker - Professor Hong G. Im <i>Hydrogen and Ammonia Turbulent Premixed Combustion: Physical Characteristics and Computational Implications</i> <i>Introduced by: Prof. Nilanjan Chakraborty</i>
11.55-12.15	Large eddy simulations of the formation of fire whirls P. Gaikwad and J. X. Wen <i>Chaired by Dr. U. Ahmed</i>
12.15-12.35	Study of Flame-Flame Interaction: Characterization of Small-Scales Structures O. Rathore and S. Navarro-Martinez <i>Chaired by Dr. U. Ahmed</i>
12.35-12.55	Development of a spectral/hp element reactive multiphase flow solver to model combustion flow regimes A. Forknall, J. Su and A. Garmory <i>Chaired by Dr. U. Ahmed</i>
12.55-13.55	Lunch
13.55-14.15	Fundamental Studies of Lifted and Attached Jet Hydrogen Flames in Cross Flows C. Wu, X. Gu, D. Bradley and J. Yang <i>Chaired by Prof. D.R. Emerson</i>
14.15-14.35	Effects of fuel Lewis number on wall heat transfer during oblique flame-wall interaction of premixed flames within turbulent boundary layers S. K. Ghai, U. Ahmed and N. Chakraborty <i>Chaired by Prof. D.R. Emerson</i>
14.35-14.55	Large Eddy Simulation of a Lean Hydrogen Combustor T. H. Un and S. Navarro-Martinez <i>Chaired by Prof. D.R. Emerson</i>

14.55-15.15	A priori assessment of combustion models for MILD combustion using Direct Numerical Simulation data H.S.A.M. Awad, K. Abo Amsha, U. Ahmed and N. Chakraborty <i>Chaired by Prof. D.R. Emerson</i>
15.15-15.30	Closing Words - Professor Nilanjan Chakraborty
15.30-16.00	Coffee in the foyer