British Novice Tournament 2017: INSERT WITTY SUBTITLE HERE

By Tom Hill, Joseph Krol, Alex Peplow, Ellie Warner, Francis Clark-Murray, Chris Stern, Theo Howe, Sam Cook, Jacob Robertson, Leonie Woodland, Julian Sutcliffe, Oliver Clarke, Matt Nixon, Tom de Bock, Dan Lawson, Tricia Goggin, Daoud Jackson, Ewan Macaulay, Evan Lynch and a couple more people.

Packet 5:

The previous tossup should have been on Aristotle:

Tossups:

1. The theological tract *De Quadam Puella* compared this non-Biblical figure to the prophet Amos. This person jumped out of a 70 foot tower whilst attempting to escape from Beaurevoir Castle, and had come to prominence after travelling to Vaucouleurs to meet Robert Baudricourt. Pierre Cauchon, the Bishop of Beauvais, led the interrogation of this person, who was captured by Burgundian forces. During the trial, she refused to stop wearing men's clothes. For 10 points, name this "Maid of Orléans", who was burned at the stake during the Hundred Years War.

ANSWER: **Joan** of **Arc** <Tom>

2. This city has more trees per person than any other city in Europe and the collapse of the dam wall of the Dale Dike reservoir in 1864 caused a Great Flood in this city. Like Brighton and Hove, this city contains parts of a national park within its boundaries; that national park is the Peak District. The World Snooker Championship is held at the Crucible arena in this city, whose nickname is the Steel City. For 10 points, name this city of southern Yorkshire, home to football teams called United and Wednesday.

ANSWER: Sheffield

3. Since 1966, leaders of this institution have worn a ring owned by Paul VI. A 1963 work by John Robinson, a member of this institution, called for increased accessibility and advocated situational ethics; but that work was heavily criticised by this institution's then leader, Michael Ramsey. This institution blamed Thatcherite policies for urban poverty in the 1985 report *Faith in the City*, even though the suffragist Maude Royden had previously described this institution as the "Tory party at prayer". For 10 points, name this religious institution led by the Archbishops of Canterbury.

ANSWER: <u>Church of England</u> or <u>Anglican Church</u> [prompt on the <u>Church</u>] <JS>

- 4. The Kaneshiro model of this phenomenon relies on females in small populations having lower sexual selection than males. The centrifugal model of this process posits that novelty arises centrally, contrary to other methods of its peripatric mode. Darwin's finches and the cichlid fish of the Great Rift Valley provide evidence for a rapid form of this process called adaptive radiation. This phenomenon can be caused by genetic drift in separated populations. For ten points, name this evolutionary process wherein populations split into groups that cannot interbreed?

 ANSWER: **speciation** (accept descriptive answers like "**forming new species**", prompt on "evolution" or "natural selection" <JR>
- 5. In a novel by this author, the central character plays jazz in a nightclub in which people cut onions to make themselves cry. In that novel by this author, one character escapes the police by hiding underneath his future wife's four skirts. Another character in that novel by this author is about to choke on a Nazi pin when he is shot by soldiers. This author created the Danzig Trilogy and the boy Oscar Matzerath, who stopped growing at the age of three, and often plays the title instrument. For 10 points, name this German Nobel Laureate, author of *The Tin Drum*.

ANSWER: Günter Wilhelm Grass

6. In a novel from this country, three visits from a warlord convinced a wise man to leave his secluded home. During the last visit, a stratagem establishing the title political landscape of the work is presented to that warlord. In another novel, one hundred and eight 'stars of destiny' are reincarnated as outlaws when they are accidentally released. Poetry written in this country between the 7th and 10th centuries provided the text for Gustav Mahler's *Das Lied von der Erde*. For 10 points, name this country, whose literary tradition includes the so-called Four Classics, including *Romance of the Three Kingdoms* and *The Water Margin* and poets such as Du Fu and Meng Haoran.

ANSWER: China <YY>

7. Sir Horace Cutler was an advocate for this project; only after it was approved did he discover that part of it went through his garden. The idea for a project like this was first proposed by the architect Edwin Lutyens in 1937, but this project was not completed until 1986. In *Good Omens* it is claimed that this road is in the shape of the sigil *odegra*, meaning 'Hail the Great Beast, Devourer of Worlds'. In the east, this road is broken by the Dartford Crossing, so is not actually a complete motorway loop. Sometimes referred to as the world's largest car park, this is, for ten points, which motorway that encircles London?

ANSWER: The M25 [or the London Orbital Motorway] <Alex>

8. This interaction was once studied using Regge theory, leading to a calculation which gave rise to the first string theory. It is now believed to be described by a different theory which becomes weakly coupled at higher energies, a phenomenon called asymptotic freedom. That model of this force is known as quantum chromodynamics. The residual form of this force is felt by hadrons such as protons. For ten points, name this fundamental force mediated by gluons and acting on colour, which binds quarks together in the nucleus.

ANSWER: <u>strong</u> interaction or <u>strong</u> force [prompt on <u>QCD</u> or <u>Quantum chromodynamics</u> before mentioned] <JR>

9. In one scene in this opera, a group of friends dine and dash, leaving Alcindoro to foot their bill. In Act One of this opera, a woman drops her key in the dark, which prompts another character to note her cold hands in the aria *Che gelida manina*. Later in this opera, Musetta gets back together with her former sweetheart Marcello by singing the flirty song *Quando me'n vo'*, and the couple try to help buy medicine for the sickly girlfriend of Marcello's roommate, a poet named Rodolfo. For 10 points, name this Puccini opera about a group of poor artists in Paris, in which Mimi dies of tuberculosis.

ANSWER: La Bohème <EJW>

10. In an essay partly titled for this character, T. S. Eliot described the "objective correlative" arguing that this character is dominated by "an emotion which is inexpressible"; that essay is "[this character] and His Problems." This character asks "What's Hecuba to him?" after seeing an actor cry whilst performing. This character stages a "play-within-a-play" in which Gonzago is murdered by having poison poured in his ear, as part of a plan he explains to his friend Horatio to reveal that his uncle Claudius killed his father. For 10 points, name this Shakespearean Prince of Denmark.

ANSWER: <u>Hamlet</u> <Tom>

11. One anthropologist examined the interaction between farming techniques and 'magic' of islanders within this body of water; that thinker debated with Marcel Mauss about a system of gift exchange in this body of water. As well as the Trobriand Islands, another island in this body of water was the location of an ethnography by Margaret Mead about adolescent sexual behaviour. Bronislaw Malinowski wrote about the *Argonauts of the Western* part of this ocean. The kula ring ceremony takes place in, for ten points, which ocean, the setting of *Coming of Age in Samoa*?

12. According to this movement, Christians are born with an "imparted righteousness", which operates alongside Jesus' "imputed righteousness". This movement takes its name from a derogatory nickname given to members of the "Holy Club" at Oxford University, whose members included George Whitefield. Members of this movement celebrate "Aldersgate Day", the anniversary of the date its founder experienced an Assurance of Salvation. The United Church of this movement is the largest mainline denomination in the US today. For 10 points, name this Protestant denomination, founded in the 18th century by Charles and John Wesley.

ANSWER: Methodism < Tom>

13. One work from this art movement depicts Jesus knocking on a door which has no handle, representing the obstinately closed mind, while another work from it shows a Shakespearean character just before drowning in a river. In addition to the artists of *The Light of the World* and *Ophelia*, Tennyson's poetry inspired several works in this movement, such as John William Waterhouse's *The Lady of Shalott*. Founded by William Holman Hunt, John Everett Millais and Dante Gabriel Rossetti, for 10 points, name this British movement, which was inspired by art prior to the Italian High Renaissance.

ANSWER: Pre-Raphaelite Brotherhood [or PRB] <JK>

14. A Cossack commander who took over this country following a 1921 coup caused controversy by violating the sanctuary of the Fatima Masumeh Shrine in Qom. After one leader of this country nationalised a predecessor to British Petroleum, the CIA overthrew him in Operation Ajax. That leader was Mohammed Mossadegh. Another leader of this country was forced to flee during a revolution that also saw 52 Americans held captive in a hostage crisis. For 10 points, name this country where a 1979 Islamic revolution replaced Mohammad Reza Shah Pahlavi with Ayatollah Khomeini.

ANSWER: Iran <EJW>

15. One man with this surname negotiated with Éamon de Valera to end the British use of Treaty Ports in the Anglo-Irish Trade Agreement. A monocle-wearing politician with this surname ran Lord Salisbury's campaign during the "khaki election" of 1900. Another man with this surname was awarded the Nobel Peace Prize for negotiating the Locarno Pact. That man's half-brother declared that "I believe it is peace for our time" after signing the Munich Agreement. For 10 points, name this surname shared by British politicians Joseph, Austen and the Prime Minister infamous for his policy of appeasement, Neville.

ANSWER: Chamberlain [accept Neville Chamberlain, Austen Chamberlain or Joseph Chamberlain] <Tom>

16. NASA has proposed that a namesake "Clipper" to study this body will be one of the first missions for the Space Launch System. It's not Enceladus, but the Hubble telescope detected possible plumes of water from this body in 2012. This moon's short 3.5 day orbit raises tidal forces that heat the core, possibly creating a global subsurface ocean. The Galilean moons of Jupiter comprise Ganymede, Callisto, Io and, for 10 points, which small, ice-covered moon, named for a Phoenician lover of Zeus?

ANSWER: Europa <OSC>

17. This former bus driver's first involvement in political life was as a bodyguard to presidential candidate José Vicente Rangel. This man cited the need for a new constitution as his motive for calling elections for a Constituent National Assembly; both the EU and US declared those elections illegitimate, and the US described this man as a "dictator". Following riots in this man's country in July and August, Jeremy Corbyn was criticised for failing to condemn this man's regime. For 10 points, name this socialist politician who succeeded Hugo Chávez as President of Venezuela.

ANSWER: Nicolás Maduro <Tom>

18. This man once angrily called Narain Karthikeyan "a cucumber", and earned a speeding penalty just 6 seconds into his first Formula 1 practice session at the 2006 Turkish Grand Prix. This man scored a point on his race début for BMW following the injury of Robert Kubica ("koo-BIT-sa") in 2007. He recently faced criticism at the Singapore Grand Prix, where he arguably caused an accident to eliminate both Max Verstappen and his current teammate Kimi Räikkönen. For 10 points, name this German racing driver who won four world championships from 2010 to 2013 driving for Red Bull, and currently drives for Ferrari.

ANSWER: Sebastian Vettel <TDB>

19. Seven siblings who appeared on a radio quiz show called "It's A Wise Child" appear in this author's short stories. In one story, the two youngest of those siblings discuss the recitation of the "Jesus Prayer", whilst in another, the eldest shoots himself after telling Sybil Carpenter about the "very tragic life" of the title creatures. This author, who wrote about the Glass family in *A Perfect Day For Bananafish* and *Franny and Zooey*, also created a character who dreams of stopping children from falling off a cliff after being expelled from Pencey Prep. For 10 points, name this author who created Holden Caulfield in *The Catcher in the Rye*.

ANSWER: J. D. Salinger < Tom>

20. One routine by this comedian suggests that the rapper Akon uses his Lamborghini to seduce hobbits. A character played by this man helps his friend pretend to play the piano by climbing inside and hitting the wires with spoons. That character earlier has a near-death experience after accidentally swallowing the *Little Book of Calm*. In a song, this man compares love to a duck which lies "shredded in a pancake/soaking in the hoisin of your lies." For 10 points, name this British comedian and "Part Troll", a former team captain on *Never Mind the Buzzcocks* who played Manny in *Black Books*.

ANSWER: Bill Bailey <Tom>

Bonuses:

- 1. This structure has an abnormal S-shaped curve in sufferers of the condition scoliosis. For ten points each: [10] Name this structure, which in humans consists of twenty-four articulating bones as well as a fused sacrum and a
- [10] Name this structure, which in humans consists of twenty-four articulating bones as well as a fused sacrum ar coccyx.

ANSWER: spine or vertebral column or backbone

[10] The articulating part of the spine is usually divided into three sections: the cervical region, the thoracic region and this other region, which may have cerebrospinal fluid collected from it during a spinal tap.

ANSWER: **lumbar** region

[10] This highest vertebra of the spine, located in the cervical region, is sometimes known as C1. A break in it, known as a Jefferson fracture, is particularly dangerous as this vertebra principally supports the head.

ANSWER: atlas < JK>

- 2. It is now thought that this term is a mistranslation of the Arandic word *alcheringa*. For 10 points each:
- [10] Name this concept which refers either to a mythic past, or to an 'everywhen', inhabited by spirit ancestors who created the landscape. Entities present in this period include the Rainbow Serpent and the Dirawong or Goanna.

ANSWER: **<u>Dreamtime</u>** [or the **<u>Dreaming</u>**]

[10] The Dreamtime is a key element in the mythology and worldview of this group of people, many of whom were displaced by British colonisation which began at Botany Bay.

ANSWER: Indigenous Australians [or Aboriginal Australians]

[10] This sandstone formation near the centre of Australia is sacred to its local Aboriginal people. For this reason, tourists are discouraged from climbing it, though many people still do.

ANSWER: <u>Uluru/Ayers Rock</u> <Alex>

- 3. This philosophical school held that the universe was deterministic, but that individuals were free to direct their will to either be in harmony with it, or to struggle fruitlessly against it. For 10 points each:
- [10] This school, founded by Zeno of Citium, also believed that virtue was the only good, and vice the only bad. All other things, such as good health and death, were described as *adiaphora*, or indifferents.

ANSWER: Stoicism

[10] Stoicism was popular amongst the Roman aristocracy, like this dramatist who was compelled to commit suicide on the orders of his former student, the emperor Nero.

ANSWER: Lucius Annaeus Seneca [the Younger]

[10] The later emperor Marcus Aurelius was also a practising Stoic, writing this collection of aphorisms.

ANSWER: The *Meditations* <Alex>

- 4. In this novel the "Love Laws" laid down "who should be loved, and how. And how much." For 10 points each:
- [10] Name this novel about the twins Rahel and Estha, the debut novel of Arundhati Roy. It includes the visit of Sophie Mol to the town of Ayemenem.

ANSWER: The God of Small Things

[10] Arundhati Roy is an author from this country, which is also the setting of Vikram Seth's *A Suitable Boy. The God of Small Things* is set in this country's state of Kerala.

ANSWER: India

[10] After twenty years, this second novel by Arundhati Roy was released earlier this year. It centres around the transgender *hijra* Anjum, and is set amidst the Kashmir insurgency.

ANSWER: The Ministry of Utmost Happiness < Tricia>

- 5. This poem describes an aged man as "but a paltry thing, some tattered clothes upon a stick", and opens with the line "that is no country for old men". For ten points each:
- [10] Name this 1928 poem, in which the author grapples with the problems of old age, concluding that he would rather travel to the title classical city on the Bosphorus.

ANSWER: "Sailing to Byzantium"

[10] "Sailing to Byzantium" is a work by this Irish poet, who wrote "The Wild Swans at Coole" and "The Tower", and imagined a "wild beast" which "slouches towards Bethlehem to be born" in "The Second Coming".

ANSWER: (William Butler) W.B. Yeats

[10] In 1913, Yeats wrote the preface to the English translation of *Gitanjali*, a collection by this Bengali poet. Yeats is widely regarded with bringing this poet to the attention of the English-speaking world.

ANSWER: Rabindranath **Tagore** [accept Ravindranatha **Thakura** or **Gurudev**] <EJW>/<JK>

- 6. A concerto grosso by this composer gained its nickname after receiving its first performance on the 24th of December. For ten points each:
- [10] Identify this composer of the "Christmas Concerto" in G minor, whose forty-eight trio sonatas were highly influential in the genre's development.

ANSWER: Arcangelo Corelli

[10] Corelli was a composer from this country. Another composer from this country, Antonio Vivaldi, wrote a group of violin concerti commonly known as *The Four Seasons*.

ANSWER: Italy

[10] *The Four Seasons* is part of this larger collection of twelve violin concerti, which also includes works titled *The Storm at Sea* and *The Hunt*.

ANSWER: The <u>Contest Between Harmony and Invention</u> [or Il <u>cimento dell'armonia e dell'inventione</u>]

- 7. Many former MPs found themselves out of a job after this year's General Election. For ten points each, name a few:
- [10] The now-disgraced Jared O'Mara defeated this former Liberal Democrat leader to gain the seat of Sheffield Hallam. His time as Deputy Prime Minister in the recent Coalition may be looked on more kindly by historians than by students.

ANSWER: Nick <u>Clegg</u> [prompt on <u>Cleggbae</u> and other expressions of reverence]

[10] This architect of the not-terribly-successful Conservative manifesto lost his Ipswich constituency in the General Election, after serving as Paymaster General until 2017.

ANSWER: Ben Gummer

[10] This former SNP leader lost his seat in Gordon to the Conservatives in the election. He had been Scotland's first minister until 2014, before resigning in the aftermath of Scotland's vote against independence in their referendum.

ANSWER: Alex(ander) **Salmond** <JK>

- 8. Name some things about tert-butoxy-carbonyl, or "boc" for short. For 10 points each:
- [10] Boc is an example of this general class of chemical group, used in chemical syntheses to allow for the conversion of less reactive groups within a molecule without affecting the most reactive.

ANSWER: protecting groups [accept "protective group"]

[10] Boc is typically used to protect this function group, which consists of a basic nitrogen single bonded to a carbon atom and two hydrogen atoms.

ANSWER: amine

[10] To remove your Boc group, you might put your compound in a solution of an ester and this strong acid, found alongside nitric acid in aqua regia.

ANSWER: **hydrochloric** acid [accept **HCl**] <CS>

- 9. This song tells the title figure to 'keep your head/ Don't forget what your good book said' and later questions when the Confederate states will pay reparations for slavery. For 10 points each:
- [10] Name this song from the album After the Gold Rush, which inspired a later song by Lynyrd Skynyrd.

ANSWER: Southern Man

[10] Southern Man is a song by this Canadian singer-songwriter who is also known for the song Heart of Gold, and for performing in a quartet with David Crosby, Stephen Stills, and Graham Nash.

ANSWER: Neil Young

[10] In response to *Southern Man*, Lynyrd Skynyrd penned this ironic celebration of life in the South, in which they celebrate how 'the skies are so blue' in the title locale where people 'love the Governor'.

ANSWER: Sweet Home Alabama < Theo>

- 10. Philip II of Spain was not happy that Elizabeth I, a heretic, was Queen of England. For 10 points each:
- [10] In 1588, this force was launched from Spain with the aim of linking up with Spanish armies in the Netherlands to invade England.

ANSWER: The **Spanish Armada**

[10] To defeat the Armada, Francis Drake used this weapon, which scattered the enemy at Gravelines. One type of these used by the Dutch were called Hellburners.

ANSWER: fireships

[10] This cousin of Drake was one of the three commanders of the English fleet during the Armada, but is better known for being the first English merchant to take part in the Triangle Trade of slaves across the Atlantic.

ANSWER: John Hawkins <JS>

- 11. The motif of a bird sitting on a wire has been an unlikely inspiration in many sectors of the arts. For ten points each:
- [10] This Canadian singer-songwriter declared that 'I have tried in my way to be free' in his song 'Bird on A Wire', which featured on his 1969 album *Songs from a Room*. He described how 'the holy dove was moving too' on his hit 'Hallelujah'.

ANSWER: Leonard Cohen

[10] The short film *For the Birds*, in which many small blue birds on a wire are annoyed by the arrival of a larger bird, was produced by this animation company. It was shown alongside this company's 2000 film *Monsters, Inc.*

ANSWER: **Pixar** Animation Studios

[10] In a somewhat darker use of the motif, this Swiss artist depicted some tortured-looking birds stuck to a wire, being turned by a hand crank, in his 1922 watercolour *Twittering Machine*.

ANSWER: Paul Klee < JK>

- 12. This character only speaks 288 words in a 2016 film named after them, and is absent entirely from a 2012 film about their 'legacy'. For ten points each:
- [10] Name this amnesiac CIA assassin, who is played by Matt Damon in a series of films about their *Identity*, *Supremacy* and *Ultimatum*.

ANSWER: Jason **Bourne** (accept <u>David Webb</u>, prompt on John Michael Kane)

[10] Jason Bourne, The Bourne Supremacy and The Bourne Ultimatum were directed by this English director, who also trained his shaky cameras on Damon in Green Zone.

ANSWER: Paul Greengrass

- [10] Along with CIA Director Dewey in *Jason Bourne*, this actor has played a sheriff tracking down a Javier Bardem assassin in *No Country for Old Men* and Agent K, partner to Will Smith's Agent J, in *Men in Black*. ANSWER: Tommy Lee **Jones** <FCM>
- 13. Answer some questions about the Roman Empire's "Crisis of the Third Century", for 10 points each:
- [10] This emperor founded the last dynasty before the Crisis of the Third Century. The first emperor to be born in Africa, he seized power after the death of Pertinax in 193 AD, and died whilst campaigning in northern Britain.

ANSWER: Septimius Severus [Prompt on Severus, do NOT accept or prompt on "Alexander Severus"]

[10] This Syrian city became independent from Rome during the Crisis until its reconquest by Aurelian in 272 AD. In recent years, its well preserved classical sites, such as the temple of Baalshamin, have been destroyed by Islamic State militants.

ANSWER: Palmyra

[10] This emperor's reign is regarded as having ended the Crisis of the Third Century. He instituted the Tetrarchy, and launched the last persecution of the Christians of the Roman Empire.

ANSWER: **Diocletian** <YY>

14. No one would know anything about New Zealand were it not for Peter Jackson's Tolkien-based filmic escapades. For 10 points each, answer some questions on the geography of film sites for *The Lord Of The Rings*. [10] The most iconic filming site is Hobbiton, in farmland on the North Island, which isn't very far from this New Zealand town that shares its name with a famous East Anglian university town home to King's College.

ANSWER: Cambridge

[10] Appearing in many of the positive plethora of panoramic scenery shots is this major mountain range of New Zealand, home to Aoraki, or Mount Cook.

ANSWER: **Southern Alps** [do not prompt on 'Alps' alone]

[10] This active volcano of the North Island starred as Mt Doom in all three movies, though, fortunately, the actual eruptions were done with CGI, rather than happening in real life.

ANSWER: Mt Ngauruhoe [n-gow-ROO-hoh-wee]

- 15. For 10 points each, answer the following on 20th century American political scandals:
- [10] This bribery scandal during the presidency of Warren G. Harding saw Secretary of the Interior Albert Bacon Fall accused of having leased army petroleum reserves in Wyoming and California to private oil companies.

ANSWER: Teapot Dome

[10] Richard Nixon's presidency was defined by this scandal which led to his impeachment and resignation. This scandal involved an attempt to cover up wiretapping and burglary at the namesake Washington DC hotel.

ANSWER: Watergate

[10] In 1998, Bill Clinton became the third US president to be impeached, despite his insistence that he "did not have sexual relations with" this White House intern.

ANSWER: Monica Lewinsky <EJW>

- 16. At its inception, only Commonwealth, Irish, and South African citizens were eligible to receive the Man Booker prize. For 10 points each, answer some questions about some non-British winners:
- [10] This author won the Booker Prize in 2015 for his novel *A Brief History of Seven Killings*, which fictionalises the events around the attempted assassination of Bob Marley.

ANSWER: Marlon James

[10] Marlon James was born in this Caribbean nation. The first section of *A Brief History of Seven Killings* is set in this country's capital of Kingston.

ANSWER: Jamaica

[10] This other Booker Prize winner was also born in the Caribbean, on the island of Trinidad. He won the prize for *In a Free State* in 1971, and is also noted for the novels *A Bend in the River* and *A House for Mr Biswas*.

ANSWER: Sir Vidiadhar Surajprasad Naipaul < Tricia>

- 17. During this battle, the Spanish and Gallic troops of one side deliberately withdrew in the centre of the battle line. Name, for 10 points each:
- [10] This greatest victory of Hannibal, which saw the advancing Romans trapped by flanking African troops and cavalry.

ANSWER: Battle of **Cannae**

[10] Cannae was part of this war, which ended with the victory of Scipio Africanus over Hannibal at Zama. This was the second of three such conflicts between Rome and a city in modern day Tunisia.

ANSWER: Second Punic War

[10] Much of our history of the 2nd Punic War comes from the work of this captive Greek historian, who was part of the entourage of Scipio Aemilianus, adoptive grandson of Africanus.

ANSWER: Polybius <OSC>

- 18. It is equal to the sum of the kinetic and potential energy operators. For ten points each:
- [10] Name this quantum mechanical operator, which when applied to a wavefunction corresponds to the total energy of a system.

ANSWER: **<u>Hamiltonian</u>** [prompt on <u>H</u>]

[10] The time-independent equation 'Hamiltonian of psi equals the energy times psi', central to quantum mechanics, is named for this Austrian physicist, though he is maybe better known for a 'cat in a box' thought experiment.

ANSWER: Erwin Schrödinger

[10] The allowed energies of a system can be described as these entities of the Schrodinger equation; in linear algebra, these values are related to similarly-named vectors whose directions are unchanged under a given linear transformation.

ANSWER: eigenvalues <JK>

19. Near the end of one canticle of this poem, the protagonist must pass through a wall of fire in order to reach the Garden of Eden. For 10 points each:

[10] Name this 100-canto poem by Dante Alighieri about a guided tour through Hell, Purgatory, and Heaven.

ANSWER: The <u>Divine Comedy</u> [or La <u>Divina Commedia</u>; prompt on <u>Inferno</u>, <u>Purgatorio</u>, or <u>Paradiso</u>]

[10] Dante's guide Virgil encourages him through the fire by constantly reminding him of this woman, whom Dante claims to have loved since he was nine years old. She takes over from Virgil to guide Dante through Heaven.

ANSWER: **Beatrice** <Alex>

[10] Dante's love for Beatrice is contrasted with the lust condemned in this character, who is "brought to one death" with her lover Paolo when their affair is discovered by her crippled husband.

ANSWER: Francesca da Rimini < Alex>

- 20. One painting depicting this city features a large brick house next to a narrow alleyway, and is called *The Little Street*. For 10 points each:
- [10] Name this Dutch city, also featured in a "view" across a river in a painting by the same artist, who produced paintings like *The Astronomer* and *The Geographer* in this city.

ANSWER: Delft

[10] *The Little Street* and *View of Delft* are both works by this Dutch Golden Age artist, perhaps better known for his indoor genre paintings of middle-class life, including *The Music Lesson* and *The Milkmaid*.

ANSWER: Johannes Vermeer

[10] Vermeer's most famous work is this portrait, depicting a woman wearing a blue headscarf and the title piece of jewellery.

ANSWER: Girl with a Pearl Earring <JK>