A gas can be heated either by applying a flame (Infrared photon barrage) or by restricting its volumetric boundaries (Compression). I'm beginning to suspect that, these two methods of heating either a gas or liquid are ultimately caused by the same mechanical process.

Current theory talks about the gas atoms/molecules undergoing an acceleration of velocity as the manifest form of an increase in energy due to heat being applied. Or in plainer English, the molecules have experienced an increase in velocity due to an increase in energy. In fact the same explanation is used when the increase in energy occurs due to the gas or liquid being compressed. It is said that the molecules have undergone an increase in velocity, due to an increase in energy, due to the fact the liquid is being compressed.

It is stated that this increase in velocity is a direct result of molecules/atoms colliding with each other and/or the walls of the container/vessel they are in. In the case of applied heat, the heat energy is said to add energy to the molecules and they increase in velocity. This increase in velocity also results in an increase in pressure due to the higher rate of collision within the vessel. In the case of compression applied to the gas or liquid, the reduction in volume results in a higher probability rate of collision and this increased rate of collision creates heat and also creates pressure due to the fact that the molecules are hitting the walls of the container more often and with greater force.

I have always instinctively doubted this interpretation. I consider it to be extremely "unaccountable" physics, when compared to all things we know across the board in regards to particle behavior. (In fact, I'm now almost sure the biggest contribution to my inability to pass physics in school was due to a sub-conscious resistance to what I was being taught [erroneously].)

When a gas is pressurized (compressed), they are saying that an increase in collision probability is what leads to an increase in energy. This increase in energy is then converted into an increase in the velocity vector-state of the molecule/atom. This is in defiance of everything we know to be true in regard's to wave-superposition. When two objects of mass collide, they absorb and exchange superpositional energy values. Particle collision of this nature described to be happening in a gas or liquid, subjected to an increase in energy, would eventually bring all molecules/atoms to a halt. In the same way that water will eventually become calm again after you drop a pebble into it. Wave super-position is the cause of the water becoming calm again. When two billiard balls collide, they superposition their energies and each ball takes on a new vector after the collision. This is what they are saying is happening in a gas or liquid when energy is applied to it.

A compressed gas will rise in temperature and its pressure will increase as well. It is subject to heat energy, but that heat energy will eventually dissipate due to heat radiation. The pressure however, will remain constant so long as the vessel maintains its volumetric integrity. (So long as it remains sealed.)

So how can the application of heat to a gas/liquid in a vessel increase the pressure only while the heat is applied? If an increase in particle velocity and rate of collision is the reason for the energy increase in each case, then it should be possible for the heated liquid/gas to maintain its pressure after the heat source is taken away, and after the heat has dissipated, but it doesn't.

Scientists will probably say this is due once again to heat loss via radiation. Keep the heat in the vessel, and it will maintain its increased pressure. But reducing the vessel's volume for a liquid or gas will increase its pressure and maintain its pressure long after the heat has dissipated from the vessel due to radiation heat loss. This is a direct contradiction of collision/velocity theorizing to explain why a gas/liquid undergoes an increase in energy and pressure when heated or compressed.

**LASING is the only process that makes any sense.**

BOTH the application of heat as well as compression of the gas/liquid can be theorised by the fundamental process of LASING of Infrared Photons. (Black Body theory also indicates that other wavebands will be present and taking part in the Lasing process, but I will be concentrating on the infrared heat photons only.)

Introducing a larger number of photons via applying heat to a liquid or gas, is basically the same thing as "pumping a laser". By introducing an external supply of heat photons (infrared photons are heat photons), we upset the thermostat effect equilibrium state of balance within the gas or liquid. The probabilities of each electron absorbing a heat photon are increased because we have more heat photons introduced into the vessel. Therefore the probabilities of the electrons emitting a heat photon again are also increased. The likely
The point is you cannot have something explode into nothing and expect it to slow down and spread like it does when we create an explosion. 

Is this why there is no middle of the universe? Because there was no big bang?; or because there was no space/time for it to explode into, so as to be subject matter just yet) actually take?

P.S. A big bang from a single point or singularity, exploding into a void of nothingness, would encounter absolutely ZERO (nil, nada) resistance to the motion of its scattered particles/matter. Exploding matter into nothingness would not be subjected to any velocity influence from the matter around it because it is all not at a temperature (energy level) of 0-4degrees Kelvin, then it IS emitting heat (infrared) photons. Compress the volume (space) and you increase the probabilities of photon absorption by an electron. This in turn increases the probability of TWO photons being re-emitted by the electron. As more photons are now being re-emitted in a smaller space, you also have another increase in probability for heat photon absorption and re-emission. It is essentially the same thing as a Super-Charger (turbo) on an internal combustion engine.

It will of course however, reach a point of saturation and "thermostat equilibrium". What this means is it wont keep getting hotter indefinitely. This is a law of thermodynamics, I have read it and I did understand it, but please don't ask me to explain it!!

So, Lasing is a wonderful way of explaining how compressing a gas or liquid results in an increase of "heat" due to an increase in pressure. How does it work the other way round though? Collision/velocity explains an increase in pressure when heat is applied, but doesn't explain compression-induced heat very well. Lasing explains compression induced heat quite well, but doesn't seem to explain Heat induced pressurization.

You have to remember this simple fundamental fact: If atoms don't molecularly bond - they repel. When you add energy to an atom, not only does it absorb and emit photons, it also fundamentally increases the amount of space it takes up. It swells up in size in other words. So in either case, the atoms are increasing in size, (taking up more space) and basically increasing their rate of repulsion of each other at the same time. The repelling process is what causes the increase in pressure. The Lasing of photons via electron absorption and emission is what causes the increase in heat radiation. This translates into an increase in temperature. Remember, heat photons are not the only photons flying around. The electrons are not the only part of each atom absorbing and emitting photons. Every part of the atom undergoes an increase in energy, this results in the atoms effectively increasing the amount of local space they control. Each gas or liquid molecule is repelling every other molecule IF they are not BONDING with them.

Once molecules take on a density of gas or liquid, they are then both subject to motion in exactly the same manner. Namely from dynamic kinetic energy type collisions caused by high and low pressure areas and sound waves as well as induced motion via stirring or the passing of other solid objects. They do not just zip around continuously for the sake of it. They will settle like I mentioned before, in the same way a pond will settle after a stone has been dropped in to disturb its rest.

Saturation is basically reached simply due to heat dissipation (photon 'absorption/radiation to outside' by the walls of the vessel), and in the case of pressurization, the loss of heat energy via radiation is also the cause of pressure stabilization.

Energy is lost in the form of "probability wave-superposition of relativistic vector states" of each molecule or atom. Gravity in other words. A "Claytons' Particle Collision", the particle collision you have when your not having a particle collision! You will have to read my theory on gravity to fully grasp the implications of this, but for now, if you just take my word for it, everything will be cool!

So, LASING is the process that causes the duality relationship of Heat and Pressure in a sealed vessel. LASING is the only mechanical process in the Universe. Particle Quantum leap is simply the end result of LASING at a scale of size and Space/Time curvature below that which we are able to successfully be able to observe and/or predict. This is also due to time dilation caused by the laws of special relativity applied in my universal theory as Size/Distance Duality.

Any Questions?

P.S. A big bang from a single point or singularity, exploding into a void of nothingness, would encounter absolutely ZERO (nil, nada) resistance to the motion of its scattered particles/matter. Exploding matter into nothingness would not be subjected to any velocity influence from the matter around it because it is all traveling along .... parallel trajectories? There is no space/time curvature....what the hell type of trajectories would this exploding "stuff" (it isn't technically matter just yet) actually take?

Is this why there is no middle of the universe? Because there was no big bang?; or because there was no space/time for it to explode into, so as to be subject to external influences in regards to the trajectory of its exploding "soup-stuff" components?

The point is you cannot have something explode into nothing and expect it to slow down and spread like it does when we create an explosion.