Friends,
For the benefit of impressionable new comers to studio acoustics,
what say we settle this ongoing foam versus wool thing once and for all.
Here are the pros & cons as I know them.
Please step in and add and correct as you see fit.

Wools: Mineral/Rock Wool & Glass Fiber

Foams: mainly Polyurethane based.
Also Melamine/Sonex/Illbruck/Basotect (the white light stuff).
Both are of the open cell type, so that the closed cell mattress type isn't right for acoustics, because of it's very limited absorption.

Acoustic absorption:
Generally similar, which is overall excellent broadband absorption,
With slight advantage to the wools.
(the comparison should be made to identical shape & thickness,
so that it is incorrect to compare typical sculptured foam to full thickness wool, especially regarding LF).

Fire hazards:
Wools meet all necessary regulations, and are especially suitable where these considerations are a must, such as public places.
Polyurethane foam is very limited in this case, it can burn easily and release dangerous gas.
Good quality foam is fire treated, which improves it to some extent, but it's still not suitable for public places, or wherever fire hazard is a major issue.
Melamine foam is much better in that sense (can be considered for public places),

Application:
Wools release their fibers easily, not to mention that these fibers are irritating and might be allergenic.
That means that wools need to be covered.
Usually, they will also need some sort of framing.
Foams can be set as is.
In other words, wools require work and preparation, foam doesn't.

Cost:
Wools are the cheapest.
Foam will always be more expensive, Melamine is more expensive than Polyurethane.

Longetivity:
Properly covered wools can last a lifetime.
Foam will last a limited amount of time (?), and is much more sensitive to weather and to physical bruising.
Melamine especially is downright sensitive to physical bruising, and will bruise very easily.

Looks:
This could be a factor to some.
You can dio all sorts of stuff with wools, but foam will look like foam, which to some can be cool, to others, not

Specific advantages:
Wool: you can make specific LF applications, such as highly effective cornertraps (Dave traps in this groups lingo), or like creating a full surface covering.
All this, and at low cost, though the time &energy put into working with wool should be taken into account.
Foam: You can theoretically do the above, but there is no sense in it, since foam has no constructional properties, and if you are anyways going to cover a surface, use wool.
The unique advantage of foam is that you don't have to prepare before hand. You just stick it to the wall. You can acoustically fine tune a room as you go, do foam basics, fire up the system, put some more pieces of foam in different places, see what it does, and if you need more, run out and buy some.
In any case, you get immediate results.

Overall considerations:
The major factor is whether you are DIY' er or not.
If you are, and you have the energy and time, go with the wools.
It will cost you less, and you can get all out acoustics, with the fully professional feel and looks.
It also depends on your situation: If you have found your final nest, go wool (you don't have to do the work, you could always get someone to do the work for you).
However, if you aren't a DIY'er , you're not up to the work, you are in a temporary places (as in renting a place for a year or two), and you can get by with basic acoustics (no full scale LF treatment), foam is a strong option (also, foam can be removed and used over again).

Regarding costs, I don't know US/EU prices, but bear in mind that the basic treatment for the smallish room doesn't need more than ~ 10 sqr. meters, preferably with a few corner foams. So is acoustic foam expensive? Yes, but not terribly so. You don't need to cover a whole room, rather, you shouldn't.
The big issue is not wool or foam, but knowing what to do with it.
This is described in length in this group.
If you do know what to do, you can get good results with both.

Regarding comparison of absorption coefficients (and the supposedly inferior foam absorption thing) in the home studio scene:
I believe that a 10% difference doesn't matter much, especially once you have an over 0.8 coeff (usually in acoustics, 10% is insignificant in most regards).
Regarding lower frequencies: In any case you won't get by sticking 2"/ 5 cm of something to the walls, whatever it's made out of.
Something extra for the LF will be needed.
If in doubt, and if the specific foam you are considering absorbs less LF than the wool you are considering, you can always use thicker foam (not to mention usage of air gaps).
Also there are corner foams to be had for LF treatment.
Two good applications for the wall surfaces would be ~ 10 cm wool, or ~ 15 cm sculptured foam (which would probably have similar overall volume to the wool anyhow).

Ido