Quad Primes and their relation to Prime gaps.

I will present patterns related to quad primes, prime gaps and 2^n. First we use N!! when N is odd. Because of a simple progression of odd numbers dividing in order by adding 6 and repeatedly adding 4 afterwards. It can be easily seen by starting with 6 and adding 4. 6,10,14,18,22,etc... and N!! Contains all odd numbers up to N. So that the 2 odd numbers before and after N!! Cannot be divisible by any odd number in the list.

With this simple pattern established it makes light work of where odd numbers can divide into other odd numbers. And we can strengthen the pattern with the use of

2^n Because all even numbers outside side of 2^n are divisible by an odd number. We can over lap the even numbers ontop of odd numbers with N!! being the central point. This let's us know that prime gaps exist between all points of 2^n - 2^(n+1) in general. And at certain points the only place primes can be is at points in the form of 2^n from the central points of ((2^n)-1)!!

These patterns highlight the quad primes can even be found in the middle of large prime gaps. Also that there are mirror primes that can separate prime gaps with a single prime at (-/+)2^n. And these gaps can happen sooner by adapting the list of N!! to primes and a mix of primes^x for example (5×7×9×11) is similar to 11!!. you can also adapt the list of odd numbers starting with 3 and use odd numbers with gaps in the form of 2^n and they will eventually collapse into having the same factors as N!! of your choice.

This can be used as a continuously adaptive seive. Making quick work of where primes can appear. Also show casing that prime gaps can collapse at the same rate that they grow. And how they uniformly distribute themselves to make a strong suggestion that quad primes can be infinite but still missing the confirmation that they are indeed infinite.